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Ludvig von Mises

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PART ONE
THE NATURE OF MONEY

CHAPTER 1
The Function of Money

1 The General Economic Conditions for the Use of Money

Where the free exchange of goods and services is unknown, money is not wanted. In a state of society in which the division of labor was a purely domestic matter and production and consumption were consummated within the single household it would be just as useless as it would be for an isolated man. But even in an economic order based on division of labor, money would still be unnecessary if the means of production were socialized, the control of production and the distribution of the finished product were in the hands of a central body, and individuals were not allowed to exchange the consumption goods allotted to them for the consumption goods allotted to others.

I.1.1
The phenomenon of money presupposes an economic order in which production is based on division of labor and in which private property consists not only in goods of the first order (consumption goods), but also in goods of higher orders (production goods). In such a society, there is no systematic centralized control of production, for this is inconceivable without centralized disposal over the means of production. Production is "anarchistic." What is to be produced, and how it is to be produced, is decided in the first place by the owners of the means of production, who produce, however, not only for their own needs, but also for the needs of others, and in their valuations take into account, not only the use-value that they themselves attach to their products, but also the use-value that these possess in the estimation of the other members of the community. The balancing of production and consumption takes place in the market, where the different producers meet to exchange goods and services by bargaining together. The function of money is to facilitate the business of the market by acting as a common medium of exchange.

I.1.2

2 The Origin of Money

Indirect exchange is distinguished from direct exchange according as a medium is involved or not.

I.1.3
Suppose that A and B exchange with each other a number of units of the commodities m and n. A acquires the commodity n because of the use-value that it has for him. He intends to consume it. The same is true of B, who acquires the commodity m for his immediate use. This is a case of direct exchange.

I.1.4
If there are more than two individuals and more than two kinds of commodity in the market, indirect exchange also is possible. A may then acquire a commodity p, not because he desires to consume it, but in order to exchange it for a second commodity q which he does desire to consume. Let us suppose that A brings to the market two units of the commodity m, B two units of the commodity n, and C two units of the commodity o, and that A wishes to acquire one unit of each of the commodities n and o, B one unit of each of the commodities o and m, and C one unit of each of the commodities m and n. Even in this case a direct exchange is possible if the subjective valuations of the three commodities permit the exchange of each unit of m, n, and o for a unit of one of the others. But if this or a similar hypothesis does not hold good, and in by far the greater number of all exchange transactions it does not hold good, then indirect exchange becomes necessary, and the demand for goods for immediate wants is supplemented by a demand for goods to be exchanged for others.*1

I.1.5
Let us take, for example, the simple case in which the commodity p is desired only by the holders of the commodity q, while the comodity q is not desired by the holders of the commodity p but by those, say, of a third commodity r, which in its turn is desired only by the possessors of p. No direct exchange between these persons can possibly take place. If exchanges occur at all, they must be indirect; as, for instance, if the possessors of the commodity p exchange it for the commodity q and then exchange this for the commodity r which is the one they desire for their own consumption. The case is not essentially different when supply and demand do not coincide quantitatively; for example, when one indivisible good has to be exchanged for various goods in the possession of several persons.

I.1.6
Indirect exchange becomes more necessary as division of labor increases and wants become more refined. In the present stage of economic development, the occasions when direct exchange is both possible and actually effected have already become very exceptional. Nevertheless, even nowadays, they sometimes arise. Take, for instance, the payment of wages in kind, which is a case of direct exchange so long on the one hand as the employer uses the labor for the immediate satisfaction of his own needs and does not have to procure through exchange the goods in which the wages are paid, and so long on the other hand as the employee consumes the goods he receives and does not sell them. Such payment of wages in kind is still widely prevalent in agriculture, although even in this sphere its importance is being continually diminished by the extension of capitalistic methods of management and the development of division of labor.*2

I.1.7
Thus along with the demand in a market for goods for direct consumption there is a demand for goods that the purchaser does not wish to consume but to dispose of by further exchange. It is clear that not all goods are subject to this sort of demand. An individual obviously has no motive for an indirect exchange if he does not expect that it will bring him nearer to his ultimate objective, the acquisition of goods for his own use. The mere fact that there would be no exchanging unless it was indirect could not induce individuals to engage in indirect exchange if they secured no immediate personal advantage from it. Direct exchange being impossible, and indirect exchange being purposeless from the individual point of view, no exchange would take place at all. Individuals have recourse to indirect exchange only when they profit by it; that is, only when the goods they acquire are more marketable than those which they surrender.

I.1.8
Now all goods are not equally marketable. While there is only a limited and occasional demand for certain goods, that for others is more general and constant. Consequently, those who bring goods of the first kind to market in order to exchange them for goods that they need themselves have as a rule a smaller prospect of success than those who offer goods of the second kind. If, however, they exchange their relatively unmarketable goods for such as are more marketable, they will get a step nearer to their goal and may hope to reach it more surely and economically than if they had restricted themselves to direct exchange.

I.1.9
It was in this way that those goods that were originally the most marketable became common media of exchange; that is, goods into which all sellers of other goods first converted their wares and which it paid every would-be buyer of any other commodity to acquire first. And as soon as those commodities that were relatively most marketable had become common media of exchange, there was an increase in the difference between their marketability and that of all other commodities, and this in its turn further strengthened and broadened their position as media of exchange.*3

I.1.10
Thus the requirements of the market have gradually led to the selection of certain commodities as common media of exchange. The group of commodities from which these were drawn was originally large, and differed from country to country; but it has more and more contracted. Whenever a direct exchange seemed out of the question, each of the parties to a transaction would naturally endeavor to exchange his superfluous commodities, not merely for more marketable commodities in general, but for the most marketable commodities; and among these again he would naturally prefer whichever particular commodity was the most marketable of all. The greater the marketability of the goods first

acquired in indirect exchange, the greater would be the prospect of being able to reach the ultimate objective without further maneuvering. Thus there would be an inevitable tendency for the less marketable of the series of goods used as media of exchange to be one by one rejected until at last only a single commodity remained, which was universally employed as a medium of exchange; in a word, money.

I.1.11

This stage of development in the use of media of exchange, the exclusive employment of a single economic good, is not yet completely attained. In quite early times, sooner in some places than in others, the extension of indirect exchange led to the employment of the two precious metals gold and silver as common media of exchange. But then there was a long interruption in the steady contraction of the group of goods employed for that purpose. For hundreds, even thousands, of years the choice of mankind has wavered undecided between gold and silver The chief cause of this remarkable phenomenon is to be found in the natural qualities of the two metals. Being physically and chemically very similar, they are almost equally serviceable for the satisfaction of human wants. For the manufacture of ornaments and jewelry of all kinds the one has proved as good as the other. (It is only in recent times that technological discoveries have been made which have considerably extended the range of uses of the precious metals and may have differentiated their utility more sharply.) In isolated communities, the employment of one or the other metal as sole common medium of exchange has occasionally been achieved, but this short-lived unity has always been lost again as soon as the isolation of the community has succumbed to participation in international trade.

I.1.12

Economic history is the story of the gradual extension of the economic community beyond its original limits of the single household to embrace the nation and then the world. But every increase in its size has led to a fresh duality of the medium of exchange whenever the two amalgamating communities have not had the same sort of money. It would not be possible for the final verdict to be pronounced until all the chief parts of the inhabited earth formed a single commercial area, for not until then would it be impossible for other nations with different monetary systems to join in and modify the international organization.

I.1.13

Of course, if two or more economic goods had exactly the same marketability, so that none of them was superior to the others as a medium of exchange, this would limit the development toward a unified monetary system. We shall not attempt to decide whether this assumption holds good of the two precious metals gold and silver. The question, about which a bitter controversy has raged for decades, has no very important bearings upon the theory of the nature of money. For it is quite certain that even if a motive had not been provided by the unequal marketability of the goods used as media of exchange, unification would still have seemed a desirable aim for monetary policy. The simultaneous use of several kinds of money involves so many disadvantages and so complicates the technique of exchange that the endeavor to unify the monetary system would certainly have been made in any case.

I.1.14

The theory of money must take into consideration all that is implied in the functioning of several kinds of money side by side. Only where its conclusions are unlikely to be affected one way or the other, may it proceed from the assumption that a single good is employed as common medium of exchange. Elsewhere, it must take account of the simultaneous use of several media of exchange. To neglect this would be to shirk one of its most difficult tasks.

I.1.15

3 The "Secondary" Functions of Money

The simple statement, that money is a commodity whose economic function is to facilitate the interchange of goods and services, does not satisfy those writers who are interested rather in the accumulation of material than in the increase of knowledge. Many investigators imagine that insufficient attention is devoted to the remarkable part played by money in economic life if it is merely credited with the function of being a medium of exchange; they do not think that due regard has been paid to the significance of money until they have enumerated half a dozen further "functions"—as if, in an economic order founded on the

exchange of goods, there could be a more important function than that of the common medium of exchange.

I.1.16
After Menger's review of the question, further discussion of the connection between the secondary functions of money and its basic function should be unnecessary.*4 Nevertheless, certain tendencies in recent literature on money make it appear advisable to examine briefly these secondary functions—some of them are coordinated with the basic function by many writers—and to show once more that all of them can be deduced from the function of money as a common medium of exchange.

I.1.17
This applies in the first place to the function fulfilled by money in facilitating credit transactions. It is simplest to regard this as part of its function as medium of exchange. Credit transactions are in fact nothing but the exchange of present goods against future goods. Frequent reference is made in English and American writings to a function of money as a standard of deferred payments.*5 But the original purpose of this expression was not to contrast a particular function of money with its ordinary economic function, but merely to simplify discussions about the influence of changes in the value of money upon the real amount of money debts. It serves this purpose admirably. But it should be pointed out that its use has led many writers to deal with the problems connected with the general economic consequences of changes in the value of money merely from the point of view of modifications in existing debt relations and to overlook their significance in all other connections.

I.1.18
The functions of money as a transmitter of value through time and space may also be directly traced back to its function as medium of exchange. Menger has pointed out that the special suitability of goods for hoarding, and their consequent widespread employment for this purpose, has been one of the most important causes of their increased marketability and therefore of their qualification as media of exchange.*6 As soon as the practice of employing a certain economic good as a medium of exchange becomes general, people begin to store up this good in preference to others. In fact, hoarding as a form of investment plays no great part in our present stage of economic development, its place having been taken by the purchase of interest-bearing property.*7 On the other hand, money still functions today as a means for transporting value through space.*8 This function again is nothing but a matter of facilitating the exchange of goods. The European farmer who emigrates to America and wishes to exchange his property in Europe for a property in America, sells the former, goes to America with the money (or a bill payable in money), and there purchases his new homestead. Here we have an absolute textbook example of an exchange facilitated by money.

I.1.19
Particular attention has been devoted, especially in recent times, to the function of money as a general medium of payment. Indirect exchange divides a single transaction into two separate parts which are connected merely by the ultimate intention of the exchangers to acquire consumption goods. Sale and purchase thus apparently become independent of each other Furthermore, if the two parties to a sale-and-purchase transaction perform their respective parts of the bargain at different times, that of the seller preceding that of the buyer (purchase on credit), then the settlement of the bargain, or the fulfillment of the seller's part of it (which need not be the same thing), has no obvious connection with the fulfillment of the buyer's part. The same is true of all other credit transactions, especially of the most important sort of credit transaction—lending. The apparent lack of a connection between the two parts of the single transaction has been taken as a reason for regarding them as independent proceedings, for speaking of the payment as an independent legal act, and consequently for attributing to money the function of being a common medium of payment. This is obviously incorrect. "If the function of money as an object which facilitates dealings in commodities and capital is kept in mind, a function that includes the payment of money prices and repayment of loans...there remains neither necessity nor justification for further discussion of a special employment, or even function of money, as a medium of payment."*9

I.1.20
The root of this error (as of many other errors in economics) must be sought in the uncritical acceptance of juristical conceptions and habits of thought. From the point of view of the law, outstanding debt is a subject which can and must be considered in isolation and entirely (or at least to some extent) without reference to the origin of the obligation to pay. Of course, in law as well as in economics, money is only the common medium of exchange. But the principal, although not exclusive, motive of the law for concerning itself with money is the problem of payment. When it seeks to answer the question, What is money? it is in order to determine how monetary liabilities can be discharged. For the jurist, money is a medium of payment. The economist, to whom the problem of money presents a different aspect, may not adopt this point of view if he does not wish at the very outset to prejudice his prospects of contributing to the advancement of economic theory.

I.1.21

CHAPTER 2
On the Measurement of Value

1 The Immeasurability of Subjective Use-Values

Although it is usual to speak of money as a measure of value and prices, the notion is entirely fallacious. So long as the subjective theory of value is accepted, this question of measurement cannot arise. In the older political economy, the search for a principle governing the measurement of value was to a certain extent justifiable. If, in accordance with an objective theory of value, the possibility of an objective concept of commodity values is accepted, and exchange is regarded as the reciprocal surrender of equivalent goods, then the conclusion necessarily follows that exchange transactions must be preceded by measurement of the quantity of value contained in each of the objects that are to be exchanged. And it is then an obvious step to regard money as the measure of value.

I.2.1
But modern value theory has a different starting point. It conceives of value as the significance attributed to individual commodity units by a human being who wishes to consume or otherwise dispose of various commodities to the best advantage. Every economic transaction presupposes a comparison of values. But the necessity for such a comparison, as well as the possibility of it, is due only to the circumstance that the person concerned has to choose between several commodities. It is quite irrelevant whether this choice is between a commodity in his own possession and one in somebody else's possession for which he might exchange it, or between the different uses to which he himself might put a given quantity of productive resources. In an isolated household, in which (as on Robinson Crusoe's desert island) there is neither buying nor selling, changes in the stocks of goods of higher and lower orders do nevertheless occur whenever anything is produced or consumed; and these changes must be based upon valuations if their returns are to exceed the outlay they involve. The process of valuation remains fundamentally the same whether the question is one of transforming labor and flour into bread in the domestic bakehouse, or of obtaining bread in exchange for clothes in the market. From the point of view of the person making the valuation, the calculation whether a certain act of production would justify a certain outlay of goods and labor is exactly the same as the comparison between the values of the commodities to be surrendered and the values of the commodities to be acquired that must precede an exchange transaction. For this reason it has been said that every economic act may be regarded as a kind of exchange.*10

I.2.2
Acts of valuation are not susceptible of any kind of measurement. It is true that everybody is able to say whether a certain piece of bread seems more valuable to him than a certain piece of iron or less valuable than a certain piece of meat. And it is therefore true that everybody is in a position to draw up an immense list of comparative values; a list which will hold good only for a given point of time, since it must assume a given combination of wants and commodities. If the individual's circumstances change, then his scale of values changes also.

I.2.3
But subjective valuation, which is the pivot of all economic activity, only arranges commodities in order of their significance; it does not measure this significance. And economic activity has no other basis than the value scales thus constructed by individuals. An exchange will take place when two commodity units are placed in a different order on the value scales of two different persons. In a market, exchanges will continue until it is no longer possible for reciprocal surrender of commodities by any two individuals to result in their each acquiring commodities that stand higher on their value scales than those surrendered. If an individual wishes to make an exchange on an economic basis, he has merely to consider the comparative significance in his own judgment of the quantities of commodities in question. Such an estimate of relative values in no way involves the idea of measurement. An estimate is a direct psychological judgment that is not dependent on any kind of intermediate or auxiliary process.

I.2.4
(Such considerations also provide the answer to a series of objections to the subjective theory of value. It would be rash to conclude, because psychology has not succeeded and is not likely to succeed in measuring desires, that it is therefore impossible ultimately to attribute the quantitatively exact exchange ratios of the market to subjective factors. The exchange ratios of commodities are based upon the value scales of the individuals dealing in the market. Suppose that A possesses three pears and B two apples; and that A values the possession of two apples more than that of three pears, while B values the possession of three pears more than that of two apples. On the basis of these estimations an exchange may take place in which three pears are given for two apples. Yet it is clear that the determination of the numerically precise exchange ratio 2 : 3, taking a single fruit as a unit, in no way presupposes that A and B know exactly by how much the satisfaction promised by possession of the quantities to be acquired by exchange exceeds the satisfaction promised by possession of the quantities to be given up.)

I.2.5
General recognition of this fact, for which we are indebted to the authors of modern value theory, was hindered for a long time by a peculiar sort of obstacle. It is not altogether a rare thing that those very pioneers who have not hesitated to clear new paths for themselves and their followers by boldly rejecting outworn traditions and ways of thinking should yet shrink sometimes from all that is involved in the rigid application of their own principles. When this is so, it remains for those who come after to endeavor to put the matter right. The present is a case in point. On the subject of the measurement of value, as on a series of further subjects that are very closely bound up with it, the founders of the subjective theory of value refrained from the consistent development of their own doctrines. This is especially true of Böhm-Bawerk. At least it is especially striking in him; for the arguments of his which we are about to consider are embodied in a system that would have provided an alternative and, in the present writer's opinion, a better, solution of the problem, if their author had only drawn the decisive conclusion from them.

I.2.6
Böhm-Bawerk points out that when we have to choose in actual life between several satisfactions which cannot be had simultaneously because our means are limited, the situation is often such that the alternatives are on the one hand one big satisfaction and on the other hand a large number of homogeneous smaller satisfactions. Nobody will deny that it lies in our power to come to a rational decision in such cases. But it is equally clear that a judgment merely to the effect that a satisfaction of the one sort is greater than a satisfaction of the other sort is inadequate for such a decision; as would even be a judgment that a satisfaction of the first sort is considerably greater than one of the other sort. Böhm-Bawerk therefore concludes that the judgment must definitely affirm how many of the smaller satisfactions outweigh one of the first sort, or in other words how many times the one satisfaction exceeds one of the others in magnitude.*11

I.2.7
The credit of having exposed the error contained in the identification of these two last propositions belongs to Cuhel. The judgment that so many small satisfactions are outweighed by a satisfaction of another kind is in fact not identical with the judgment that the one satisfaction is so many times greater than one of the others. The two would be identical only if the satisfaction afforded by a number of commodity units taken together were equal to the satisfaction afforded by a single unit on its own multiplied by the number

of units. That this assumption cannot hold good follows from Gossen's law of the satisfaction of wants. The two judgments, "I would rather have eight plums than one apple" and "I would rather have one apple than seven plums," do not in the least justify the conclusion that Böhm-Bawerk draws from them when he states that therefore the satisfaction afforded by the consumption of an apple is more than seven times but less than eight times as great as the satisfaction afforded by the consumption of a plum. The only legitimate conclusion is that the satisfaction from one apple is greater than the total satisfaction from seven plums but less than the total satisfaction from eight plums.*12

I.2.8
This is the only interpretation that can be harmonized with the fundamental conception expounded by the marginal-utility theorists, and especially by Böhm-Bawerk himself, that the utility (and consequently the subjective use-value also) of units of a commodity decreases as the supply of them increases. But to accept this is to reject the whole idea of measuring the subjective use-value of commodities. Subjective use-value is not susceptible of any kind of measurement.

I.2.9
The American economist Irving Fisher has attempted to approach the problem of value measurement by way of mathematics.*13 His success with this method has been no greater than that of his predecessors with other methods. Like them, he has not been able to surmount the difficulties arising from the fact that marginal utility diminishes as supply increases, and the only use of the mathematics in which he clothes his arguments, and which is widely regarded as a particularly becoming dress for investigations in economics, is to conceal a little the defects of their clever but artificial construction.

I.2.10
Fisher begins by assuming that the utility of a particular good or service, though dependent on the supply of that good or service, is independent of the supply of all others. He realizes that it will not be possible to achieve his aim of discovering a unit for the measurement of utility unless he can first show how to determine the proportion between two given marginal utilities. If, for example, an individual has 100 loaves of bread at his disposal during one year, the marginal utility of a loaf to him will be greater than if he had 150 loaves. The problem is, to determine the arithmetical proportion between the two marginal utilities. Fisher attempts to do this by comparing them with a third utility. He therefore supposes the individual to have B gallons of oil annually as well, and calls that increment of B whose utility is equal to that of the 100th loaf of bread. In the second case, when not 100 but 150 loaves are available, it is assumed that the supply of B remains unchanged. Then the utility of the 150th loaf may be equal, say, to the utility of b/2. Up to this point it is unnecessary to quarrel with Fisher's argument; but now follows a jump that neatly avoids all the difficulties of the problem. That is to say, Fisher simply continues, as if he were stating something quite self-evident: "Then the utility of the 150th loaf is said to be half the utility of the 100th." Without any further explanation he then calmly proceeds with his problem, the solution of which (if the above proposition is accepted as correct) involves no further difficulties, and so succeeds eventually in deducing a unit which he calls a "util." It does not seem to have occurred to him that in the particular sentence just quoted he has argued in defiance of the whole of marginal-utility theory and set himself in opposition to all the fundamental doctrines of modern economics. For obviously this conclusion of his is legitimate only if the utility of b is equal to twice the utility of b/2. But if this were really so, the problem of determining the proportion between two marginal utilities could have been solved in a quicker way, and his long process of deduction would not have been necessary. Just as justifiably as he assumes that the utility of is equal to twice the utility of b/2, he might have assumed straightaway that the utility of the 150th loaf is two-thirds of that of the 100th.

I.2.11
Fisher imagines a supply of B gallons that is divisible into n small quantities b, or 2n small quantities b/2. He assumes that an individual who has this supply B at his disposal regards the value of commodity unit x as equal to that of b and the value of commodity unit y as equal to that of b/2. And he makes the further assumption that in both valuations, that is, both in equating the value of x with that of b and in equating the value of y with that of b/2, the individual has the same supply of B gallons at his disposal.

I.2.12
He evidently thinks it possible to conclude from this that the utility of b is twice as great as that of b/2. The error here is obvious. The individual is in the one case faced with the choice between x (the value of the 100th loaf) and b = 2b/2. He finds it impossible to decide between the two, i.e., he values both equally. In the second case he has to choose between y (the value of the 150th loaf) and b/2. Here again he finds that both alternatives are of equal value. Now the question arises, what is the proportion between the marginal utility of b and that of b/2? We can determine this only by asking ourselves what the proportion is between the marginal utility of the nth part of a given supply and that of the 2nth part of the same supply, between that of b/n and that of b/2n. For this purpose let us imagine the supply B split up into 2n portions of b/2n. Then the marginal utility of the (2n-1)th portion is greater than that of the 2nth portion. If we now imagine the same supply B divided into n portions, then it clearly follows that the marginal utility of the nth portion is equal to that of the (2n-1)th portion plus that of the 2nth portion in the previous case. It is not twice as great as that of the 2nth portion, but more than twice as great. In fact, even with an unchanged supply, the marginal utility of several units taken together is not equal to the marginal utility of one unit multiplied by the number of units, but necessarily greater than this product. The value of two units is greater than, but not twice as great as, the value of one unit.*14

I.2.13
Perhaps Fisher thinks that this consideration may be disposed of by supposing b and b/2 to be such small quantities that their utility may be reckoned infinitesimal. If this is really his opinion, then it must first of all be objected that the peculiarly mathematical conception of infinitesimal quantities is inapplicable to economic problems. The utility afforded by a given amount of commodities, is either great enough for valuation, or so small that it remains imperceptible to the valuer and cannot therefore affect his judgment. But even if the applicability of the conception of infinitesimal quantities were granted, the argument would still be invalid, for it is obviously impossible to find the proportion between two finite marginal utilities by equating them with two infinitesimal marginal utilities.

I.2.14
Finally, a few words must be devoted to Schumpeter's attempt to set up as a unit the satisfaction resulting from the consumption of a given quantity of commodities and to express other satisfactions as multiples of this unit. Value judgments on this principle would have to be expressed as follows: "The satisfaction that I could get from the consumption of a certain quantity of commodities is a thousand times as great as that which I get from the consumption of an apple a day," or "For this quantity of goods I would give at the most a thousand times this apple." *15 Is there really anybody on earth who is capable of adumbrating such mental images or pronouncing such judgments? Is there any sort of economic activity that is actually dependent on the making of such decisions? Obviously not.*16 Schumpeter makes the same mistake of starting with the assumption that we need a measure of value in order to be able to compare one "quantity of value" with another. But valuation in no way consists in a comparison of two "quantities of value." It consists solely in a comparison of the importance of different wants. The judgment "Commodity a is worth more to me than commodity b" no more presupposes a measure of economic value than the judgment "A is dearer to me—more highly esteemed—than B" presupposes a measure of friendship.

I.2.15

2 Total Value

If it is impossible to measure subjective use-value, it follows directly that it is impracticable to ascribe "quantity" to it. We may say, the value of this commodity is greater than the value of that; but it is not permissible for us to assert, this commodity is worth so much. Such a way of speaking necessarily implies a definite unit. It really amounts to stating how many times a given unit is contained in the quantity to be defined. But this kind of calculation is quite inapplicable to processes of valuation.

I.2.16
The consistent application of these principles implies a criticism also of Schumpeter's views on the total value of a stock of goods. According to Wieser, the total value of a stock of goods is given by multiplying the number of items or portions constituting the stock by their

marginal utility at any given moment. The untenability of this argument is shown by the fact that it would prove that the total stock of a free good must always be worth nothing. Schumpeter therefore suggests a different formula in which each portion is multiplied by an index corresponding to its position on the value scale (which, by the way, is quite arbitrary) and these products are then added together or integrated. This attempt at a solution, like the preceding, has the defect of assuming that it is possible to measure marginal utility and "intensity" of value. The fact that such measurement is impossible renders both suggestions equally useless. Mastery of the problem must be sought in some other way.

I.2.17

Value is always the result of a process of valuation. The process of valuation compares the significance of two complexes of commodities from the point of view of the individual making the valuation. The individual making the valuation and the complexes of goods valued, that is, the subject and the objects of the valuation, must enter as indivisible elements into any given process of valuation. This does not mean that they are necessarily indivisible in other respects as well, whether physically or economically. The subject of an act of valuation may quite well be a group of persons, a state or society or family, so long as it acts in this particular case as a unit, through a representative. And the objects thus valued may be collections of distinct units of commodities so long as they have to be dealt with in this particular case as a whole. There is nothing to prevent either subject or object from being a single unit for the purposes of one valuation even though in another their component parts may be entirely independent of each other The same people who, acting together through a representative as a single agent, such as a state, make a judgment as to the relative values of a battleship and a hospital, are the independent subjects of valuations of other commodities, such as cigars and newspapers. It is just the same with commodities. Modern value theory is based on the fact that it is not the abstract importance of different kinds of need that determines the scales of values, but the intensity of specific desires. Starting from this, the law of marginal utility was developed in a form that referred primarily to the usual sort of case in which the collections of commodities are divisible. But there are also cases in which the total supply must be valued as it stands.

I.2.18

Suppose that an economically isolated individual possesses two cows and three horses and that the relevant part of his scale of values (that item valued highest being placed first) is as follows: 1, a cow; 2, a horse; 3, a horse; 4,a horse; 5, a cow. If this individual has to choose between one cow and one horse he will rather be inclined to sacrifice the cow than the horse. If wild animals attack one of his cows and one of his horses, and it is impossible for him to save both, then he will try to save the horse. But if the whole of his stock of either animal is in danger, his decision will be different. Supposing that his stable and cowshed catch fire and that he can only rescue the occupants of one and must leave the others to their fate, then if he values three horses less than two cows he will attempt to save not the three horses but the two cows. The result of that process of valuation which involves a choice between one cow and one horse is a higher estimation of the horse. The result of the process of valuation which involves a choice between the whole available stock of cows and the whole available stock of horses is a higher estimation of the stock of cows.

I.2.19

Value can rightly be spoken of only with regard to specific acts of appraisal. It exists in such connections only; there is no value outside the process of valuation. There is no such thing as abstract value. Total value can be spoken of only with reference to a particular instance of an individual or other valuing "subject" having to choose between the total available quantities of certain economic goods. Like every other act of valuation, this is complete in itself. The person making the choice does not have to make use of notions about the value of units of the commodity. His process of valuation, like every other, is an immediate inference from considerations of the utilities at stake. When a stock is valued as a whole, its marginal utility, that is to say, the utility of the last available unit of it, coincides with its total utility, since the total supply is one indivisible quantity. This is also true of the total value of free goods, whose separate units are always valueless, that is, are always relegated to a sort of limbo at the very end of the value scale, promiscuously intermingled with the units of all the other free goods.*17

I.2.20

3 Money as a Price Index

What has been said should have made sufficiently plain the unscientific nature of the practice of attributing to money the function of acting as a measure of price or even of value. Subjective value is not measured, but graded. The problem of the measurement of objective use-value is not an economic problem at all. (It may incidentally be remarked that a measurement of efficiency is not possible for every species of commodity and is at the best only available within separate species, while every possibility, not only of measurement, but even of mere scaled comparison, vanishes as soon as we seek to establish a relation between two or more kinds of efficiency. It may be possible to measure and compare the calorific value of coal and of wood, but it is in no way possible to reduce to a common objective denominator the objective efficiency of a table and that of a book.)

I.2.21
Neither is objective exchange value measurable, for it too is the result of the comparisons derived from the valuations of individuals. The objective exchange value of a given commodity unit may be expressed in units of every other kind of commodity. Nowadays exchange is usually carried on by means of money, and since every commodity has therefore a price expressible in money, the exchange value of every commodity can be expressed in terms of money. This possibility enabled money to become a medium for expressing values when the growing elaboration of the scale of values which resulted from the development of exchange necessitated a revision of the technique of valuation.

I.2.22
That is to say, opportunities for exchanging induce the individual to rearrange his scales of values. A person in whose scale of values the commodity "a cask of wine" comes after the commodity "a sack of oats" will reverse their order if he can exchange a cask of wine in the market for a commodity that he values more highly than a sack of oats. The position of commodities in the value scales of individuals is no longer determined solely by their own subjective use-value, but also by the subjective use-value of the commodities that can be obtained in exchange for them, whenever the latter stand higher than the former in the estimation of the individual. Therefore, if he is to obtain the maximum utility from his resources, the individual must familiarize himself with all the prices in the market.

I.2.23
For this, however, he needs some help in finding his way among the confusing multiplicity of the exchange ratios. Money, the common medium of exchange, which can be exchanged for every commodity and with which every commodity can be procured, is preeminently suitable for this. It would be absolutely impossible for the individual, even if he were a complete expert in commercial matters, to follow every change of market conditions and make the corresponding alterations in his scale of use-values and exchange values, unless he chose some common denominator to which he could reduce each exchange ratio. Because the market enables any commodity to be turned into money and money into any commodity, objective exchange value is expressed in terms of money. Thus money becomes a price index, in Menger's phrase. The whole structure of the calculations of the entrepreneur and the consumer rests on the process of valuing commodities in money. Money has thus become an aid that the human mind is no longer able to dispense with in making economic calculations.*18 If in this sense we wish to attribute to money the function of being a measure of prices, there is no reason why we should not do so. Nevertheless, it is better to avoid the use of a term which might so easily be misunderstood as this. In any case the usage certainly cannot be called correct—we do not usually describe the determination of latitude and longitude as a "function" of the stars.*19

I.2.24

CHAPTER 3
The Various Kinds of Money

1 Money and Money Substitutes

When an indirect exchange is transacted with the aid of money, it is not necessary for the money to change hands physically; a perfectly secure claim to an equivalent sum, payable on demand, may be transferred instead of the actual coins. In this by itself there is nothing remarkable or peculiar to money. What is peculiar, and only to be explained by reference to the special characteristics of money; is the extraordinary frequency of this way of completing monetary transactions.

I.3.1
In the first place, money is especially well adapted to constitute the substance of a generic obligation. Whereas the fungibility of nearly all other economic goods is more or less circumscribed and is often only a fiction based on an artificial commercial terminology, that of money is almost unlimited. Only that of shares and bonds can be compared with it. The sole factor that could possibly prevent any of these from being completely fungible is the difficulty of sub-dividing their separate units; and various expedients have been adopted, which, at least as far as money is concerned, have entirely robbed this difficulty of all practical significance.

I.3.2
A still more important circumstance is involved in the nature of the function that money performs. A claim to money may be transferred over and over again in an indefinite number of indirect exchanges without the person by whom it is payable ever being called upon to settle it. This is obviously not true as far as other economic goods are concerned, for these are always destined for ultimate consumption.

I.3.3
The special suitability for facilitating indirect exchanges possessed by absolutely secure and immediately payable claims to money, which we may briefly refer to as money substitutes, is further increased by their standing in law and commerce.

I.3.4
Technically, and in some countries legally as well, the transfer of a banknote scarcely differs from that of a coin. The similarity of outward appearance is such that those who are engaged in commercial dealings are usually unable to distinguish between those objects that actually perform the function of money and those that are merely employed as substitutes for them. The businessman does not worry about the economic problems involved in this; he is only concerned with the commercial and legal characteristics of coins, notes, checks, and the like. To him, the facts that banknotes are transferable without documentary evidence, that they circulate like coins in round denominations, that no fight of recovery lies against their previous holders, that the law recognizes no difference between them and money as an instrument of debt settlement, seem good enough reason for including them within the definition of the term money, and for drawing a fundamental distinction between them and cash deposits, which can be transferred only by a procedure that is much more complex technically and is also regarded in law as of a different kind. This is the origin of the popular conception of money by which everyday life is governed. No doubt it serves the purposes of the bank official, and it may even be quite useful in the business world at large, but its introduction into the scientific terminology of economics is most undesirable.

I.3.5
The controversy about the concept of money is not exactly one of the most satisfactory chapters in the history of our science. It is chiefly remarkable for the smother of juristic and commercial technicalities in which it is enveloped and for the quite undeserved significance that has been attached to what is after all merely a question of terminology. The solution of the question has been re garded as an end in itself and it seems to have been completely forgotten that the real aim should have been simply to facilitate further investigation. Such a discussion could not fail to be fruitless.

I.3.6
In attempting to draw a line of division between money and those objects that outwardly resemble it, we only need to bear in mind the goal of our investigation. The present discussion aims at tracing the laws that determine the exchange ratio between money and other economic goods. This and nothing else is the task of the economic theory of money. Now our terminology must be suited to our problem. If a particular group of objects is to be singled out from among all those that fulfill a monetary function in commerce and, under the special name of money (which is to be reserved to this group alone), sharply contrasted with the rest (to which this name is denied), then this distinction must be made in a way that will facilitate the further progress of the investigation.

I.3.7
It is considerations such as these that have led the present writer to give the name of money substitutes and not that of money to those objects that are employed like money in commerce but consist in perfectly secure and immediately convertible claims to money.

I.3.8
Claims are not goods;*20 they are means of obtaining disposal over goods. This determines their whole nature and economic significance. They themselves are not valued directly, but indirectly; their value is derived from that of the economic goods to which they refer. Two elements are involved in the valuation of a claim: first, the value of the goods to whose possession it gives a right; and, second, the greater or less probability that possession of the goods in question will actually be obtained. Furthermore, if the claim is to come into force only after a period of time, then consideration of this circumstance will constitute a third factor in its valuation. The value on January 1 of a right to receive ten sacks of coal on December 31 of the same year will be based not directly on the value of ten sacks of coal, but on the value of ten sacks of coal to be delivered in a year's time. This sort of calculation is a matter of common experience, as also is the fact that in reckoning the value of claims their soundness or security is taken into account.

I.3.9
Claims to money are, of course, no exception. Those which are payable on demand, if there is no doubt about their soundness and no expense connected with their settlement, are valued just as highly as cash and tendered and accepted in the same way as money.*21 Only claims of this sort—that is, claims that are payable on demand, absolutely safe as far as human foresight goes, and perfectly liquid in the legal sense—are for business purposes exact substitutes for the money to which they refer. Other claims, of course, such as notes issued by banks of doubtful credit or bills that are not yet mature, also enter into financial transactions and may just as well be employed as general media of exchange. This, according to our terminology, means that they are money. But then they are valued independently; they are reckoned equivalent neither to the sums of money to which they refer nor even to the worth of the rights that they embody. What the further special factors are that help to determine their exchange value, we shall discover in the course of our argument.

I.3.10
Of course it would be in no way incorrect if we attempted to include in our concept of money those absolutely secure and immediately convertible claims to money that we have preferred to call money substitutes. But what must be entirely condemned is the widespread practice of giving the name of money to certain classes of money substitutes, usually banknotes, token money, and the like, and contrasting them sharply with the remaining kinds, such as cash deposits.*22 This is to make a distinction without any adequate difference; for banknotes, say, and cash deposits differ only in mere externals, important perhaps from the business and legal points of view, but quite insignificant from the point of view of economics.

I.3.11
On the other hand, arguments of considerable weight may be urged in favor of including all money substitutes without exception in the single concept of money. It may be pointed out, for instance, that the significance of perfectly secure and liquid claims to money is quite different from that of claims to other economic goods; that whereas a claim on a commodity must sooner or later be liquidated, this is not necessarily true of claims to money. Such claims may pass from hand to hand for indefinite periods and so take the place of money without any attempt being made to liquidate them. It may be pointed out that those who require money will be quite satisfied with such claims as these, and that those who wish to

spend money will find that these claims answer their purpose just as well; and that consequently the supply of money substitutes must be reckoned in with that of money, and the demand for them with the demand for money. It may further be pointed out that whereas it is impossible to satisfy an increase in the demand, say, for bread by issuing more breadtickets without adding to the actual supply of bread itself, it is perfectly possible to satisfy an increased demand for money by just such a process as this. It may be argued, in brief, that money substitutes have certain peculiarities of which account is best taken by including them in the concept of money.

I.3.12
Without wishing to question the weight of such arguments as these, we shall on grounds of convenience prefer to adopt the narrower formulation of the concept of money, supplementing it with a separate concept of money substitutes. Whether this is the most advisable course to pursue, whether perhaps some other procedure might not lead to a better understanding of our subject matter, must be left to the judgment of the reader To the author it appears that the way chosen is the only way in which the difficult problems of the theory of money can be solved.

I.3.13

2 The Peculiarities of Money Substitutes

Economic discussion about money must be based solely on economic considerations and may take legal distinctions into account only insofar as they are significant from the economic point of view also. Such discussion consequently must proceed from a concept of money based, not on legal definitions and discriminations, but on the economic nature of things. It follows that our decision not to regard drafts and other claims to money as constituting money itself must not be interpreted merely in accordance with the narrow juristic concept of a claim to money. Besides strictly legal claims to money, we must also take into account such relationships as are not claims in the juristic sense, but are nevertheless treated as such in commercial practice because some concern or other deals with them as if they actually did constitute claims against itself.*23

I.3.14
There can be no doubt that the German token coins minted in accordance with the Coinage Act of July 9, 1873, did not in law constitute claims to money. Perhaps there are some superficial critics who would be inclined to classify these coins actually as money because they consisted of stamped silver or nickel or copper discs that had every appearance of being money. But despite this, from the point of view of economics these token coins merely constituted drafts on the national Treasury. The second paragraph of section nine of the Coinage Act (in its form of June 1, 1909) obliged the Bundesrat to specify those centers that would pay out gold coins on demand in return for not less than 200 marks' worth of silver coins or fifty marks' worth of nickel and copper coins. Certain branches of the Reichsbank were entrusted with this function. Another section of the Coinage Act (sec. 8) provided that the Reich would always be in a position actually to maintain this convertibility. According to this section, the total value of the silver coins minted was never to exceed twenty marks per head of the population, nor that of the nickel and copper coins two and one-half marks per head. In the opinion of the legislature, these sums represented the demand for small coins, and there was consequently no danger that the total issue of token coinage would exceed the public demand for it. Admittedly, there was no statutory recognition of any right to conversion on the part of holders of token coins, and the limitation of legal tender (sec. 9, par 1) was only an inadequate substitute for this. Nevertheless, it is a matter of general knowledge that the token coins were in fact cashed without any demur at the branches of the Reichsbank specified by the chancellor

I.3.15
Exactly the same sort of significance was enjoyed by the Reich Treasury notes, of which not more than 120 million marks' worth were allowed to be in circulation. These also (sec. 5 of the act of April 30, 1874) were always cashed for gold by the Reichsbank on behalf of the Treasury. It is beside the point that the Treasury notes were not legal tender in private transactions while everybody was obliged to accept silver coins in amounts up to twenty marks and nickel and copper coins in amounts up to one mark; for, although they were not legally bound to accept them in settlement of debts, people in fact accepted them readily.

I.3.16
Another example is afforded by the German thaler of the period from the introduction of the gold standard until the withdrawal of the thaler from circulation on October 1, 1907. During the whole of this period the thaler was undoubtedly legal tender But if we seek to go behind this expression, whose juristic derivation makes it useless for our present purpose, and ask if the thaler was money during this period, the answer must be that it was not. It is true that it was employed in commerce as a medium of exchange; but it could be used in this way solely because it was a claim to something that really was money, that is, to the common medium of exchange. For although neither the Reichsbank nor the Reich nor its separate constituent kingdoms and duchies nor anybody else was obliged to cash them, the Reichsbank, acting on behalf of the government, always took pains to ensure that no more thalers were in circulation than were demanded by the public. It achieved this result by refusing to press thalers on its customers when paying out. This, together with the circumstance that thalers were legal tender both to the bank and to the Reich, was sufficient to turn them in effect into drafts that could always be converted into money, with the result that they circulated at home as perfectly satisfactory substitutes for money. It was repeatedly suggested to the directors of the Reichsbank that they should cash their own notes not in gold but in thalers (which would have been well within the letter of the law) and pay out gold only at a premium, with the object of hindering the export of it. But the bank steadily refused to adopt this or any proposal of a similar nature.

I.3.17
The exact nature of the token coinage in other countries has not always been so easy to understand as that of Germany, whose banking and currency system was fashioned under the influence of such men as Bamberger, Michaelis, and Soetbeer. In some legislation, the theoretical basis of modern token-coinage policy may not be so easy to discover or to demonstrate as in the examples already dealt with. Nevertheless, all such policy has ultimately the same intent. The universal legal peculiarity of token coinage is the limitation of its power of payment to a specified maximum sum; and as a rule this provision is supplemented by legislative restriction of the amount that may be minted.

I.3.18
There is no such thing as an economic concept of token coinage. All that economics can distinguish is a particular subgroup within the group of claims to money that are employed as substitutes for money, the members of this subgroup being intended for use in transactions where the amounts involved are small. The fact that the issue and circulation of token coins are subjected to special legal rules and regulations is to be explained by the special nature of the purpose that they serve. The general recognition of the right of the holder of a banknote to receive money in exchange for it while the conversion of token coins is in many countries left to administrative discretion is a result of the different lines of development that notes and token coinage have followed respectively. Token coins have arisen from the need for facilitating the exchange of small quantities of goods of little value. The historical details of their development have not yet been brought to light and, almost without exception, all that has been written on the subject is of purely numismatical or metrological importance.*24 Nevertheless, one thing can safely be asserted: token coinage is always the result of attempts to remedy deficiencies in the existing monetary system. It is those technical difficulties, that hinder the subdivision of the monetary unit into small coins, that have led, after all sorts of unsuccessful attempts, to the solution of the problem that we adopt nowadays. In many countries, while this development has been going on, a kind of fiat money*25 has sometimes been used in small transactions, with the very inconvenient consequence of having two independent kinds of money performing side by side the function of a common medium of exchange. To avoid the inconveniences of such a situation the small coins were brought into a fixed legal ratio with those used in larger transactions and the necessary precautions were taken to prevent the quantity of small coins from exceeding the requirements of commerce. The most important means to this end has always been the restriction of the quantity minted to that which seems likely to be needed for making small payments, whether this is fixed by law or strictly adhered to without such compulsion. Along with this has gone the limitation of legal tender in private dealings to a certain relatively small amount. The danger that these regulations would prove inadequate has never seemed very great, and consequently legislative provision for conversion of the token coins has been either entirely neglected or left incomplete by omission of a clear statement of the holder's right to change them for money. But everywhere nowadays those token coins that are rejected from circulation are accepted without demur by the state, or some other body such as the central bank, and thus their nature as claims to money is established. Where this

policy has been discontinued for a time and the attempt made by suspending effectual conversion of the token coins to force more of them into circulation than was required, they have become credit money, or even commodity money. Then they have no longer been regarded as claims to money, payable on demand, and therefore equivalent to money, but have been valued independently.

I.3.19
The banknote has followed quite a different line of development. It has always been regarded as a claim, even from the juristic point of view. The fact has never been lost sight of that if its value was to be kept equal to that of money, steps would have to be taken to ensure its permanent convertibility into money. That a cessation of cash payments would alter the economic character of banknotes could hardly escape notice; in the case of the quantitatively less important coins used in small transactions it could more easily be forgotten. Furthermore, the smaller quantitative importance of token coins means that it is possible to maintain their permanent convertibility without establishing special funds for the purpose. The absence of such special funds may also have helped to disguise the real nature of token coinage.*26

I.3.20
Consideration of the monetary system of Austria-Hungary is particularly instructive. The currency reform that was inaugurated in 1892 was never formally completed, and until the disruption of the Hapsburg monarchy the standard remained legally what is usually called a paper standard, since the Austro-Hungarian Bank was not obliged to redeem its own notes, which were legal tender to any amount. Nevertheless, from 1900 to 1914 Austria-Hungary really possessed a gold standard or gold-exchange standard, for the bank did in fact readily provide gold for commercial requirements. Although according to the letter of the law it was not obliged to cash its notes, it offered bills of exchange and other claims payable abroad in gold (checks, notes, and the like), at a price below the upper theoretical gold point. Under such conditions, those who wanted gold for export naturally preferred to buy claims of this sort, which enabled them to achieve their purpose more cheaply than by the actual export of gold.

I.3.21
For internal commerce as well, in which the use of gold was exceptional since the population had many years before gone over to banknotes and token coins,*27 the bank cashed its notes for gold without being legally bound to do so. And this policy was pursued, not accidentally or occasionally or without full recognition of its significance, but deliberately and systematically, with the object of permitting Austria and Hungary to enjoy the economic advantages of the gold standard. Both the Austrian and the Hungarian governments, to whose initiative this policy of the bank was due, cooperated as far as they were able. But in the first place it was the bank itself which had to ensure, by following an appropriate discount policy, that it would always be in a position to carry out with promptitude its voluntary undertaking to redeem its notes. The measures that it took with this purpose in view did not differ fundamentally in any way from those adopted by the banks-of-issue in other gold-standard countries.*28 Thus the notes of the Austro-Hungarian Bank were in fact nothing but money substitutes. The money of the country, as of other European countries, was gold.

I.3.22

3 Commodity Money, Credit Money, and Fiat Money

The economic theory of money is generally expressed in a terminology that is not economic but juristic. This terminology has been built up by writers, statesmen, merchants, judges, and others whose chief interests have been in the legal characteristics of the different kinds of money and their substitutes. It is useful for dealing with those aspects of the monetary system that are of importance from the legal point of view; but for purposes of economic investigation it is practically valueless. Sufficient attention has scarcely been devoted to this shortcoming, despite the fact that confusion of the respective provinces of the sciences of law and economics has nowhere been so frequent and so fraught with mischievous consequences as in this very sphere of monetary theory. It is a mistake to deal with economic problems according to legal criteria. The juristic phraseology, like the results of juristic research into monetary problems, must be regarded by economics as one of the objects of its investigations. It is not the task of economics to criticize it, although it is

entitled to exploit it for its own purposes. There is nothing to be said against using juristic technical terms in economic argument where this leads to no undesirable consequences. But for its own special purposes, economics must construct its own special terminology.

I.3.23

There are two sorts of thing that may be used as money: on the one hand, physical commodities as such, like the metal gold or the metal silver; and, on the other hand, objects that do not differ technologically from other objects that are not money, the factor that decides whether they are money being not a physical but a legal characteristic. A piece of paper that is specially characterized as money by the imprint of some authority is in no way different, technologically considered, from another piece of paper that has received a similar imprint from an unauthorized person, just as a genuine five-franc piece does not differ technologically from a "genuine replica." The only difference lies in the law that regulates the manufacture of such coins and makes it impossible without authority. (In order to avoid every possible misunderstanding, let it be expressly stated that all that the law can do is to regulate the issue of the coins and that it is beyond the power of the state to ensure in addition that they actually shall become money; that is, that they actually shall be employed as a common medium of exchange. All that the state can do by means of its official stamp is to single out certain pieces of metal or paper from all the other things of the same kind so that they can be subjected to a process of valuation independent of that of the rest. Thus it permits those objects possessing the special legal qualification to be used as a common medium of exchange while the other commodities of the same sort remain mere commodities. It can also take various steps with the object of encouraging the actual employment of the qualified commodities as common media of exchange. But these commodities can never become money just because the state commands it; money can be created only by the usage of those who take part in commercial transactions.)

I.3.24

We may give the name commodity money to that sort of money that is at the same time a commercial commodity; and the name fiat money to money that comprises things with a special legal qualification. A third category may be called credit money, this being that sort of money which constitutes a claim against any physical or legal person. But these claims must not be both payable on demand and absolutely secure; if they were, there could be no difference between their value and that of the sum of money to which they referred, and they could not be subjected to an independent process of val uation on the part of those who dealt with them. In some way or other the maturity of these claims must be postponed to some future time. It can hardly be contested that fiat money in the strict sense of the word is theoretically conceivable. The theory of value proves the possibility of its existence. Whether fiat money has ever actually existed is, of course, another question, and one that cannot offhand be answered affirmatively. It can hardly be doubted that most of those kinds of money that are not commodity money must be classified as credit money. But only detailed historical investigation could clear this matter up.

I.3.25

Our terminology should prove more useful than that which is generally employed. It should express more clearly the peculiarities of the processes by which the different types of money are valued. It is certainly more correct than the usual distinction between metallic money and paper money. Metallic money comprises not only standard money but also token coins and such coins as the German thaler of the period 1873-1907; and paper money, as a rule, comprises not merely such fiat money and credit money as happen to be made of paper, but also convertible notes issued by banks or the state. This terminology is derived from popular usage. Previously, when more often than nowadays "metallic" money really was money and not a money substitute, perhaps the nomenclature was a little less in-appropriate than it is now. Furthermore, it corresponded—perhaps still corresponds—to the naive and confused popular conception of value that sees in the precious metals something "intrinsically" valuable and in paper credit money something necessarily anomalous. Scientifically, this terminology is perfectly useless and a source of endless misunderstanding and misrepresentation. The greatest mistake that can be made in economic investigation is to fix attention on mere appearances, and so to fail to perceive the fundamental difference between things whose externals alone are similar, or to discriminate between fundamentally similar things whose externals alone are different.

I.3.26
Admittedly, for the numismatist and the technologist and the historian of art there is very little difference between the five-franc piece before and after the cessation of free coinage of silver, while the Austrian silver gulden even of the period 1879 to 1892 appears to be fundamentally different from the paper gulden. But it is regrettable that such superficial distinctions as this should still play a part in economic discussion.

I.3.27
Our threefold classification is not a matter of mere terminological gymnastics; the theoretical discussion of the rest of this book should demonstrate the utility of the concepts that it involves.

I.3.28
The decisive characteristic of commodity money is the employment for monetary purposes of a commodity in the technological sense. For the present investigation, it is a matter of complete indifference what particular commodity this is; the important thing is that it is the commodity in question that constitutes the money, and that the money is merely this commodity. The case of fiat money is quite different. Here the deciding factor is the stamp, and it is not the material bearing the stamp that constitutes the money, but the stamp itself. The nature of the material that bears the stamp is a matter of quite minor importance. Credit money, finally, is a claim falling due in the future that is used as a general medium of exchange.

I.3.29

4 The Commodity Money of the Past and of the Present

Even when the differentiation of commodity money, credit money, and fiat money is accepted as correct in principle and only its utility disputed, the statement that the freely mintable currency of the present day and the metallic money of previous centuries are examples of commodity money is totally rejected by many authorities and by still more of the public at large. It is true that as a rule nobody denies that the older forms of money were commodity money. It is further generally admitted that in earlier times coins circulated by weight and not by tale. Nevertheless, it is asserted, money changed its nature long ago. The money of Germany and England in 1914, it is said, was not gold, but the mark and the pound. Money nowadays consists of "specified units with a definite significance in terms of value, that is assigned to them by law" (Knapp). "By 'the standard' we mean the units of value (florins, francs, marks, etc.) that have been adopted as measures of value, and by 'money' we mean the tokens (coins and notes) that represent the units that function as a measure of value. The controversy as to whether silver or gold or both together should function as a standard and as currency is an idle one, because neither silver nor gold ever has performed these functions or ever could have done so" (Hammer).*29

I.3.30
Before we proceed to test the truth of these remarkable assertions, let us make one brief observation on their genesis—although it would really be more correct to say renascence than to say genesis, since the doctrines involved exhibit a very close relationship with the oldest and most primitive theories of money. Just as these were, so the nominalistic monetary theories of the present day are, characterized by their inability to contribute a single word toward the solution of the chief problem of monetary theory—one might in fact simply call it the problem of monetary theory—namely that of explaining the exchange ratios between money and other economic goods. For their authors, the economic problem of value and prices simply does not exist. They have never thought it necessary to consider how market ratios are established or what they signify. Their attention is accidentally drawn to the fact that a German thaler (since 1873), or an Austrian silver florin (since 1879), is essentially different from a quantity of silver of the same weight and fineness that has not been stamped at the government mint. They notice a similar state of affairs with regard to "paper money." They do not understand this, and endeavor to find an answer to the riddle. But at this point, just because of their lack of acquaintance with the theory of value and prices, their inquiry takes a peculiarly unlucky turn. They do not inquire how the exchange ratios between money and other economic goods are established. This obviously seems to them quite a self-evident matter. They formulate their problem in another way: How does it come about that three twenty-mark pieces are equivalent to twenty thalers despite the fact that the silver contained in the thalers has a lower market value than the gold contained in

the marks? And their answer runs: Because the value of money is determined by the state, by statute, by the legal system. Thus, ignoring the most important facts of monetary history, they weave an artificial network of fallacies; a theoretical construction that collapses immediately the question is put: What exactly are we to understand by a unit of value? But such impertinent questions can only occur to those who are acquainted with at least the elements of the theory of prices. Others are able to content themselves with references to the "nominality" of the unit of value. No wonder, then, that these theories should have achieved such popularity with the man in the street, especially since their kinship with inflationism was bound to commend them strongly to all "cheap-money" enthusiasts.

I.3.31
It may be stated as an assured result of investigation into monetary history that at all times and among all peoples the principal coins have been tendered and accepted, not by tale without consideration of their quantity and quality, but only as pieces of metal of specific degrees of weight and fineness. Where coins have been accepted by tale, this has always been in the definite belief that the stamp showed them to be of the usual fineness of their kind and of the correct weight. Where there were no grounds for this assumption, weighing and testing were resorted to again.

I.3.32
Fiscal considerations have led to the promulgation of a theory that attributes to the minting authority the right to regulate the purchasing power of the coinage as it thinks fit. For just as long as the minting of coins has been a government function, governments have tried to fix the weight and content of the coins as they wished. Philip VI of France expressly claimed the right "to mint such money and give it such currency and at such rate as we desire and seems good to us"*30 and all medieval rulers thought and did as he in this matter. Obliging jurists supported them by attempts to discover a philosophical basis for the divine right of kings to debase the coinage and to prove that the true value of the coins was that assigned to them by the ruler of the country.

I.3.33
Nevertheless, in defiance of all official regulations and prohibitions and fixing of prices and threats of punishment, commercial practice has always insisted that what has to be considered in valuing coins is not their face value but their value as metal. The value of a coin has always been determined, not by the image and superscription it bears nor by the proclamation of the mint and market authorities, but by its metal content. Not every kind of money has been accepted at sight, but only those kinds with a good reputation for weight and fineness. In loan contracts, repayment in specific kinds of money has been stipulated for, and in the case of a change in the coinage, fulfillment in terms of metal required.*31 In spite of all fiscal influences, the opinion gradually gained general acceptance, even among the jurists, that it was the metal value—the bonitas intrinseca as they called it—that was to be considered when repaying money debts.*32

I.3.34
Debasement of the coinage was unable to force commercial practice to attribute to the new and lighter coins the same purchasing power as the old and heavier coins.*33 The value of the coinage fell in proportion to the diminution of its weight and quality. Even price regulations took into account the diminished purchasing power of money due to its debasement. Thus the Schöffen or assessors of Schweidnitz in Silesia used to have the newly minted pfennigs submitted to them, assess their value, and then in consultation with the city council and elders fix the prices of commodities accordingly. There has been handed down to us from thirteenth-century Vienna a forma institutionis que fit per civium arbitrium annuatim tempore quo denarii renovantur pro rerum venalium qualibet emptione in which the prices of commodities and services are regulated in connection with the introduction of a new coinage in the years 1460 to 1474. Similar measures were taken on similar occasions in other cities.*34

I.3.35
Wherever disorganization of the coinage had advanced so far that the presence of a stamp on a piece of metal was no longer any help in determining its actual content, commerce ceased entirely to rely on the official monetary system and created its own system of measuring the precious metals. In large transactions, ingots and trade tokens were used. Thus, the German merchants visiting the fair at Geneva took ingots of refined gold with them and made their purchases with these, employing the weights used at the Paris market,

instead of using money. This was the origin of the Markenskudo or scutus marcharum, which was nothing but the merchants' usual term for 3.765 grams of refined gold. At the beginning of the fifteenth century, when the Geneva trade was gradually being transferred to Lyons, the gold mark had become such a customary unit of account among the merchants that bills of exchange expressed in terms of it were carried to and from the market. The old Venetian lire di grossi had a similar origin.*35 In the giro banks that sprang up in all big commercial centers at the beginning of the modern era we see a further attempt to free the monetary system from the authorities' abuse of the privilege of minting. The clearinghouse business of these banks was based either on coins of a specific fineness or on ingots. This bank money was commodity money in its most perfect form.

I.3.36

The nominalists assert that the monetary unit, in modern countries at any rate, is not a concrete commodity unit that can be defined in suitable technical terms, but a nominal quantity of value about which nothing can be said except that it is created by law. Without touching upon the vague and nebulous nature of this phraseology, which will not sustain a moment's criticism from the point of view of the theory of value, let us simply ask: What, then, were the mark, the franc, and the pound before 1914? Obviously, they were nothing but certain weights of gold. Is it not mere quibbling to assert that Germany had not a gold standard but a mark standard? According to the letter of the law, Germany was on a gold standard, and the mark was simply the unit of account, the designation of 1/2790 kg. of refined gold. This is in no way affected by the fact that nobody was bound in private dealings to accept gold ingots or foreign gold coins, for the whole aim and intent of state intervention in the monetary sphere is simply to release individuals from the necessity of testing the weight and fineness of the gold they receive, a task which can only be undertaken by experts and which involves very elaborate precautionary measures. The narrowness of the limits within which the weight and fineness of the coins are legally allowed to vary at the time of minting, and the establishment of a further limit to the permissible loss by wear of those in circulation, are much better means of securing the integrity of the coinage than the use of scales and nitric acid on the part of all who have commercial dealings. Again, the right of free coinage, one of the basic principles of modern monetary law, is a protection in the opposite direction against the emergence of a difference in value between the coined and uncoined metal. In large-scale international trade, where differences that are negligible as far as single coins are concerned have a cumulative importance, coins are valued, not according to their number, but according to their weight; that is, they are treated not as coins but as pieces of metal. It is easy to see why this does not occur in domestic trade. Large payments within a country never involve the actual transfer of the amounts of money concerned, but merely the assignment of claims, which ultimately refer to the stock of precious metal of the central bank.

I.3.37

The role played by ingots in the gold reserves of the banks is a proof that the monetary standard consists in the precious metal, and not in the proclamation of the authorities.

I.3.38

Even for present-day coins, so far as they are not money substitutes, credit money, or fiat money, the statement is true that they are nothing but ingots whose weight and fineness are officially guaranteed.*36 The money of those modern countries where metal coins with no mint restrictions are used is commodity money just as much as that of ancient and medieval nations.

I.3.39

PART TWO
THE VALUE OF MONEY

CHAPTER 7
The Concept of the Value of Money

1 Subjective and Objective Factors in the Theory of the Value of Money

The central element in the economic problem of money is the objective exchange value of money, popularly called its purchasing power. This is the necessary starting point of all discussion; for it is only in connection with its objective exchange value that those peculiar properties of money that have differentiated it from commodities are conspicuous.

II.7.1
This must not be understood to imply that subjective value is of less importance in the theory of money than elsewhere. The subjective estimates of individuals are the basis of the economic valuation of money just as of that of other goods. And these subjective estimates are ultimately derived, in the case of money as in the case of other economic goods, from the significance attaching to a good or complex of goods as the recognized necessary condition for the existence of a utility, given certain ultimate aims on the part of some individual.*1 Nevertheless, while the utility of other goods depends on certain external facts (the objective use-value of the commodity) and certain internal facts (the hierarchy of human needs), that is, on conditions that do not belong to the category of the economic at all but are partly of a technological and partly of a psychological nature, the subjective value of money is conditioned by its objective exchange value, that is, by a characteristic that falls within the scope of economics.

II.7.2
In the case of money, subjective use-value and subjective exchange value coincide.*2 Both are derived from objective exchange value, for money has no utility other than that arising from the possibility of obtaining other economic goods in exchange for it. It is impossible to conceive of any function of money, qua money, that can be separated from the fact of its objective exchange value. As far as the use-value of a commodity is concerned, it is immaterial whether the commodity also has exchange value or not; but for money to have use-value, the existence of exchange value is essential.

II.7.3
This peculiarity of the value of money can also be expressed by saying that, as far as the individual is concerned, money has no use-value at all, but only subjective exchange value. This, for example, is the practice of Rau*3 and Böhm-Bawerk.*4 Whether the one or the other phraseology is employed, scientific investigation of the characteristic will lead to the same conclusions. There is no reason to enter upon a discussion of this point, especially since the distinction between value in use and value in exchange no longer holds the important place in the theory of value that it used to have.*5 All that we are concerned with is to show that the task of economics in dealing with the value of money is a bigger one than its task in dealing with the value of commodities. When explaining the value of commodities, the economist can and must be content to take subjective use-value for granted and leave investigation of its origins to the psychologist; but the real problem of the value of money only begins where it leaves off in the case of commodity values, viz., at the point of tracing the objective determinants of its subjective value, for there is no subjective value of money without objective exchange value. It is not the task of the economist, but of the natural scientist, to explain why corn is useful to man and valued by him; but it is the task of the economist alone to explain the utility of money. Consideration of the subjective value of money without discussion of its objective exchange value is impossible. In contrast to commodities, money would never be used unless it had an objective exchange value or purchasing power. The subjective value of money always depends on the subjective value of the other economic goods that can be obtained in exchange for it. Its subjective value is in fact a derived concept. If we wish to estimate the significance that a given sum of money

has, in view of the known dependence upon it of a certain satisfaction, we can do this only on the assumption that the money possesses a given objective exchange value. "The exchange value of money is the anticipated use-value of the things that can be obtained with it."*6 Whenever money is valued by anybody it is because he supposes it to have a certain purchasing power.

II.7.4
It might possibly be objected that the mere possession by money of an undefined amount of objective exchange value is not alone sufficient to guarantee the possibility of using it as a medium of exchange; that it is also necessary that this purchasing power should be present in a certain degree, neither too great nor too small, but such that the proportion between the value of the units of money and that of the units of commodity is a convenient one for carrying through the ordinary exchange transactions of daily life; that even if it were true that half of the money in a country could perform the same service as the whole stock if the value of the monetary unit were doubled, yet it is doubtful if a similar proposition could be asserted of the case in which its value was increased a millionfold, or diminished to one-millionth, in inverse correspondence with changes in the quantity of it, since such a currency would hardly be capable of fulfilling the functions of a common medium of exchange so well as the currencies in actual use; that we should try to imagine a commodity money of which a whole ton, or one of which only a thousandth of a milligram was equivalent to a dollar, and think of the inconveniences, the insuperable obstacles in fact, which the employment of such a medium would inevitably place in the way of commerce.

II.7.5
However true this may be, the question of the actual dimensions of the exchange ratio between money and commodities and of the size of the monetary unit is not an economic problem. It is a question that belongs to discussion of the technical conditions that make any particular good suitable for use as money. The relative scarcity of the precious metals, great enough to give them a high objective exchange value but not so great as that of the precious stones or radium and therefore not great enough to make their exchange value too high, must indeed be reckoned, along with such of their other characteristics as their practically unlimited divisibility, their malleability, and their powers of resistance to destructive external influences, as among the factors that were once decisive in causing them to be recognized as the most marketable goods and consequently to be employed as money. But nowadays, as monetary systems have developed, the particular level of value of the precious metals no longer has any important bearing on their use as money. The modern organization of the clearing system and the institution of fiduciary media have made commerce independent of the volume and weight of the monetary material.

2 The Objective Exchange Value of Money

II.7.6
It follows from what has been said that there can be no discussion of the problem of the value of money without consideration of its objective exchange value. Under modern conditions, objective exchange value, which Wieser also calls Verkehrswert (or value in business transactions), is the most important kind of value, because it governs the social and not merely the individual aspect of economic life. Except in its explanation of the fundamentals of value theory, economics deals almost exclusively with objective exchange value.*7 And while this is true to some extent of all goods, including those which are useful apart from any exchange value which they possess, it is still truer of money.

II.7.7
"The objective exchange value of goods is their objective significance in exchange, or, in other words, their capacity in given circumstances to procure a specific quantity of other goods as an equivalent in exchange."*8 It should be observed that even objective exchange value is not really a property of the goods themselves, bestowed on them by nature, for in the last resort it also is derived from the human process of valuing individual goods. But the exchange ratios that are established between different goods in commercial transactions, and are determined by the collective influence of the subjective valuations of all the persons doing business in the market, present themselves to separate individuals, who usually have an infinitesimal influence on the determination of the ratios, as accomplished facts, which in most cases have to be accepted unconditionally. It has thus been easy for false abstraction from this state of affairs to give rise to the opinion that each good comes to the market endowed with a definite quantity of value independent of the valuations of individuals.*9

From this point of view, goods are not exchanged for one another, by human beings; they simply exchange.

II.7.8
Objective exchange value, as it appears in the subjective theory of value, has nothing except its name in common with the old idea developed by the Classical School of a value in exchange inherent in things themselves. In the value theory of Smith and Ricardo, and in that of their successors, value in exchange plays the leading part. These theories attempt to explain all the phenomena of value by starting from value in exchange, which they interpret as labor value or cost-of-production value. For modern value theory their terminology can claim only a historical importance, and a confusion of the two concepts of exchange value need no longer be feared. This removes the objections that have recently been made to the continued use of the expression "objective exchange value."*10

II.7.9
If the objective exchange value of a good is its power to command a certain quantity of other goods in exchange, its price is this actual quantity of other goods. It follows that the concepts of price and objective exchange value are by no means identical. "But it is, nevertheless, true that both obey the same laws. For when the law of price declares that a good actually commands a particular price, and explains why it does so, it of course implies that the good is able to command this price, and explains why it is able to do so. The law of price comprehends the law of exchange value."*11

II.7.10
By "the objective exchange value of money" we are accordingly to understand the possibility of obtaining a certain quantity of other economic goods in exchange for a given quantity of money; and by "the price of money" this actual quantity of other goods. It is possible to express the exchange value of a unit of money in units of any other commodity and speak of the commodity price of money; but in actual life this phraseology and the concept it expresses are unknown. For nowadays money is the sole indicator of prices.

3 The Problems Involved in the Theory of the Value of Money

II.7.11
The theory of money must take account of the fundamental difference between the principles which govern the value of money and those which govern the value of commodities. In the theory of the value of commodities it is not necessary at first to pay any attention to objective exchange value. In this theory, all phenomena of value and price determination can be explained with subjective use-value as the starting point. It is otherwise in the theory of the value of money; for since money, in contrast to other goods, can fulfill its economic function only if it possesses objective exchange value, an investigation into its subjective value demands an investigation first into this objective exchange value. In other words, the theory of the value of money leads us back through subjective exchange value to objective exchange value.

II.7.12
Under the present economic system, which is founded on the division of labor and the free exchange of products, producers as a rule do not work directly on their own behalf but with a view to supplying the market. Consequently their economic calculations are determined not by the subjective use-values of their products, but by their subjective exchange values. Valuations which ignore the subjective exchange value, and consequently the objective exchange value, of a product and take account only of its subjective use-value, are nowadays most exceptional. They are on the whole limited to those cases in which the object has a sentimental value. But if we disregard those things to which certain individuals attach a symbolical significance because they remind them of experiences or persons that they wish to remember, while in the eyes of others for which they have not this personal interest the things possess a very much lower value or even no value at all, it cannot be denied that human valuations of goods are based upon their exchange value. It is not use-value, but exchange value, that appears to govern the modern economic order. Nevertheless, if we trace to its deepest springs, first the subjective and then the objective exchange value of commodities, we find that in the last resort it is still the subjective use-value of things that determines the esteem in which they are held. For, quite apart from the fact that the commodities acquired in exchange for the products are always valued according to their subjective use-value, the only valuations that are of final importance in the determination of

prices and objective exchange value are those based on the subjective use-value that the products have for those persons who are the last to acquire them through the channels of commerce and who acquire them for their own consumption.

II.7.13
The case of money is different. Its objective exchange value cannot be referred back to any sort of use-value independent of the existence of this objective exchange value. In the origins of monetary systems, money is still a commodity which eventually ceases to circulate on reaching the hands of a final buyer or consumer.*12 In the early stages of the history of money there were even monetary commodities whose natural qualities definitely precluded their employment as money for more than a short time. An ox or a sack of corn cannot remain in circulation for ever; it has sooner or later to be withdrawn for consumption if that part of its value which does not depend on its employment as money is not to be diminished by a deterioration of its substance. In a developed monetary system, on the other hand, we find commodity money, of which large quantifies remain constantly in circulation and are never consumed or used in industry; credit money, whose foundation, the claim to payment, is never made use of; and possibly even fiat money, which has no use at all except as money.

II.7.14
Many of the most eminent economists have taken it for granted that the value of money and of the material of which it is made depends solely on its industrial employment and that the purchasing power of our present-day metallic money, for instance, and consequently the possibility of its continued employment as money, would immediately disappear if the properties of the monetary material as a useful metal were done away with by some accident or other.*13 Nowadays this opinion is no longer tenable, not merely because there is a whole series of phenomena which it leaves unaccounted for, but chiefly because it is in any case opposed to the fundamental laws of the theory of economic value. To assert that the value of money is based on the nonmonetary employment of its material is to eliminate the real problem altogether.*14 Not only have we to explain the possibility of fiat money, the material of which has a far lower value without the official stamp than with it; we must also answer the question, whether the possibility of a monetary employment of the commodity money material affects its utility and consequently its value, and if so to what extent. The same problem arises in the case of credit money.

II.7.15
Part of the stock of gold at the command of mankind is used for monetary purposes, part for industrial. A change from one kind of use to the other is always possible. Ingots pass from the vaults of the banks to the workshops of the goldsmiths and gilders, who also directly withdraw current coins from circulation and melt them down. On the other hand, things made of gold, even with a high value as works of art, find their way to the mint when unfavorable market conditions render a sale at anything higher than the bullion price impossible. One and the same piece of metal can even fulfill both purposes simultaneously, as will be seen if we think of ornaments that are used as money or of a coin that is worn by its owner as jewelry until he parts with it again.*15

II.7.16
Investigations into the foundations of the value of money must eliminate those determinants that arise from the properties of the monetary material as a commodity, since these present no peculiarity that could distinguish the value of money from that of other commodities. The value of commodity money is of importance for monetary theory only insofar as it depends on the peculiar economic position of the money, on its function as a common medium of exchange. Changes in the value of the monetary material that arise from its characteristics as a commodity are consequently to be considered only so far as they seem likely to make it more or less suitable for performing the function of money. Apart from this, monetary theory must take the value of the monetary material that arises from its industrial usefulness as given.

II.7.17
The material of which commodity money is made must have the same value whether it is used as money or otherwise. Whether a change in the value of gold originates in its employment as money or in its employment as a commodity, in either case the value of the whole stock changes uniformly.*16

II.7.18
It is otherwise with credit money and fiat money. With these, the substance that bears the impression is essentially insignificant in the determination of the value of the money. In some circumstances it may have a relatively high exchange value comprising a considerable fraction of the total exchange value of the individual coin or note. But this value, which is not based on the monetary properties of the coin or note, only becomes of practical importance at the moment when the value based on the monetary property vanishes, that is, at the moment when the individuals participating in commerce cease to use the coin or note in question as a common medium of exchange. When this is not the case, the coins or notes bearing the monetary impression must have a higher exchange value than other pieces of the same material so long as these are not marked out by any special characteristics.

II.7.19
Again, in the case of credit money the claims used as money have similarly a different exchange value from other claims of the same kind that are not used as money. The hundred-gulden notes which circulated as money in Austria-Hungary before the reform of the currency had a higher exchange value than, say, a government security with a nominal value of a hundred gulden, notwithstanding the fact that the latter bore interest and the former did not.

II.7.20
Until gold was used as money it was valued merely on account of the possibility of using it for ornamental purposes. If it had never been used as money, or if it had ceased to be so used, its present-day value would be determined solely by the extent to which it was known to be useful in industry. But additional opportunities of using it provided an addition to the original reasons for esteeming it; gold began to be valued partly because it could be used as a common medium of exchange. It is not surprising that its value consequently rose, or that at least a decrease in its value which possibly would have occurred for other reasons was counterbalanced. Nowadays the value of gold, our principal modern monetary material, is based on both possibilities of employment, on that for monetary purposes and on that for industrial purposes.*17

II.7.21
It is impossible to say how far the present value of money depends on its monetary employment and how far on its industrial employment. When the institution of money was first established, the industrial basis of the value of the precious metals may have preponderated; but with progress in the monetary organization of economic life the monetary employment has become more and more important. It is certain that nowadays the value of gold is largely supported by its monetary employment, and that its demonetization would affect its price in an overwhelming fashion.*18 The sharp decline in the price of silver since 1873 is recognized as largely due to the demonetization of this metal in most countries. And when, between 1914 and 1918, many countries replaced gold by banknotes and Treasury notes so that gold flowed to those countries that had remained on a gold standard, the value of gold fell very considerably.

II.7.22
The value of the materials that are used for the manufacture of fat money and credit money is also influenced by their use as money as well as by all their other uses. The production of token coins is nowadays one of the most important uses of silver, for example. Again, when the minting of coins from nickel was begun over fifty years ago, the price of nickel rose so sharply that the director of the English mint stated in 1873 that if minting from nickel were continued the cost of the metal alone would exceed the face value of the coins.*19 If we prefer to regard this sort of use as industrial and not monetary, however, it is because token coins are not money but money substitutes, and consequently the peculiar interactions between changes in the value of money and changes in the value of the monetary material are absent in these cases.

II.7.23
The task of the theory of the value of money is to expound the laws which regulate the determination of the objective exchange value of money. It is not its business to concern itself with the determination of the value of the material from which commodity money is made so far as this value does not depend on the monetary, but on the other, employment of this material. Neither is it its task to concern itself with the determination of the value of those materials that are used for making the concrete embodiments of fiat money. It

discusses the objective exchange value of money only insofar as this depends on its monetary function.

II.7.24
The other forms of value present no special problems for the theory of the value of money. There is nothing to be said about the subjective value of money that differs in any way from what economics teaches of the subjective value of other economic goods. And all that it is important to know about the objective use-value of money may be summed up in the one statement—it depends on the objective exchange value of money.

II.7.25

CHAPTER 8
The Determinants of the Objective Exchange Value, or Purchasing Power of Money
(I) The Element of Continuity in the Objective Exchange Value of Money

1 The Dependence of the Subjective Valuation of Money on the Existence of Objective Exchange Value

According to modern value theory, price is the resultant of the interaction in the market of subjective valuations of commodities and price goods. From beginning to end, it is the product of subjective valuations. Goods are valued by the individuals exchanging them, according to their subjective use-values, and their exchange ratios are determined within that range where both supply and demand are in exact quantitative equilibrium. The law of price stated by Menger and Böhm-Bawerk provides a complete and numerically precise explanation of these exchange ratios; it accounts exhaustively for all the phenomena of direct exchange. Under bilateral competition, market price is determined within a range whose upper limit is set by the valuations of the lowest bidder among the actual buyers and the highest offerer among the excluded would-be sellers, and whose lower limit is set by the valuations of the lowest offerer among the actual sellers and the highest bidder among the excluded would-be buyers.

II.8.1
This law of price is just as valid for indirect as for direct exchange. The price of money, like other prices, is determined in the last resort by the subjective valuations of buyers and sellers. But, as has been said already, the subjective use-value of money, which coincides with its subjective exchange value, is nothing but the anticipated use-value of the things that are to be bought with it. The subjective value of money must be measured by the marginal utility of the goods for which the money can be exchanged.*20

II.8.2
It follows that a valuation of money is possible only on the assumption that the money has a certain objective exchange value. Such a point d'appui is necessary before the gap between satisfaction and "useless" money can be bridged. Since there is no direct connection between money as such and any human want, individuals can obtain an idea of its utility and consequently of its value only by assuming a definite purchasing power. But it is easy to see that this supposition cannot be anything but an expression of the exchange ratio ruling at the time in the market between the money and commodities.*21

II.8.3
Once an exchange ratio between money and commodities has been established in the market, it continues to exercise an influence beyond the period during which it is maintained; it provides the basis for the further valuation of money. Thus the past objective exchange value of money has a certain significance for its present and future valuation. The money prices of today are linked with those of yesterday and before, and with those of tomorrow and after.

II.8.4

But this alone will not suffice to explain the problem of the element of continuity in the value of money; it only postpones the explanation. To trace back the value that money has today to that which it had yesterday, the value that it had yesterday to that which it had the day before, and so on, is to raise the question of what determined the value of money in the first place. Consideration of the origin of the use of money and of the particular components of its value that depend on its monetary function suggests an obvious answer to this question. The first value of money was clearly the value which the goods used as money possessed (thanks to their suitability for satisfying human wants in other ways) at the moment when they were first used as common media of exchange. When individuals began to acquire objects, not for consumption, but to be used as media of exchange, they valued them according to the objective exchange value with which the market already credited them by reason of their "industrial" usefulness, and only as an additional consideration on account of the possibility of using them as media of exchange. The earliest value of money links up with the commodity value of the monetary material. But the value of money since then has been influenced not merely by the factors dependent on its "industrial" uses, which determine the value of the material of which the commodity money is made, but also by those which result from its use as money. Not only its supply and demand for industrial purposes, but also its supply and demand for use as a medium of exchange, have influenced the value of gold from that point of time onward when it was first used as money.*22

II.8.5

2 The Necessity for a Value Independent of the Monetary Function Before an Object Can Serve as Money

If the objective exchange value of money must always be linked with a preexisting market exchange ratio between money and other economic goods (since otherwise individuals would not be in a position to estimate the value of the money), it follows that an object cannot be used as money unless, at the moment when its use as money begins, it already possesses an objective exchange value based on some other use. This provides both a refutation of those theories which derive the origin of money from a general agreement to impute fictitious value to things intrinsically valueless*23 and a confirmation of Menger's hypothesis concerning the origin of the use of money.

II.8.6

This link with a preexisting exchange value is necessary not only for commodity money, but equally for credit money and fiat money.*24 No fiat money could ever come into existence if it did not satisfy this condition. Let us suppose that, among those ancient and modern kinds of money about which it may be doubtful whether they should be reckoned as credit money or fiat money, there have actually been representatives of pure fiat money. Such money must have come into existence in one of two ways. It may have come into existence because money substitutes already in circulation, that is, claims payable in money on demand, were deprived of their character as claims, and yet still used in commerce as media of exchange. In this case, the starting point for their valuation lay in the objective exchange value that they had at the moment when they were deprived of their character as claims. The other possible case is that in which coins that once circulated as commodity money are transformed into fiat money by cessation of free coinage (either because there was no further minting at all or because minting was continued only on behalf of the Treasury), no obligation of conversion being de jure or de facto assumed by anybody, and nobody having any grounds for hoping that such an obligation ever would be assumed by anybody. Here the starting point for the valuation lies in the objective exchange value of the coins at the time of the cessation of free coinage.

II.8.7

Before an economic good begins to function as money it must already possess exchange value based on some other cause than its monetary function. But money that already functions as such may remain valuable even when the original source of its exchange value has ceased to exist. Its value then is based entirely on its function as common medium of exchange.*25

II.8.8

3 The Significance of Preexisting Prices in the Determination of Market Exchange Ratios

From what has just been said, the important conclusion follows that a historically continuous component is contained in the objective exchange value of money.

II.8.9
The past value of money is taken over by the present and transformed by it; the present value of money passes on into the future and is transformed in its turn. In this there is a contrast between the determination of the exchange value of money and that of the exchange value of other economic goods. All preexisting exchange ratios are quite irrelevant so far as the actual levels of the reciprocal exchange ratios of other economic goods are concerned. It is true that if we look beneath the concealing monetary veil to the real exchange ratios between goods we observe a certain continuity. Alterations in real prices occur slowly as a rule. But this stability of prices has its cause in the stability of the price determinants, not in the law of price determination itself. Prices change slowly because the subjective valuations of human beings change slowly. Human needs, and human opinions as to the suitability of goods for satisfying those needs, are no more liable to frequent and sudden changes than are the stocks of goods available for consumption, or the manner of their social distribution. The fact that today's market price is seldom very different from yesterday's is to be explained by the fact that the circumstances that determined yesterday's price have not greatly changed overnight, so that today's price is a resultant of nearly identical factors. If rapid and erratic variations in prices were usually encountered in the market, the conception of objective exchange value would not have attained the significance that it is actually accorded both by consumer and producer.

II.8.10
In this sense, reference to an inertia of prices is unobjectionable, although the errors of earlier economists should warn us of the real danger that the use of terms borrowed from mechanics may lead to a "mechanical" system, that is, to one that abstracts erroneously from the subjective valuations of individuals. But any suggestion of a causal relationship between past and present prices must be decisively rejected.

II.8.11
It is not disputed that there are institutional forces in operation which oppose changes in prices that would be necessitated by changes in valuations, and which are responsible when changes in prices that would have been caused by changes in supply and demand are postponed and when small or transitory changes in the relations between supply and demand lead to no corresponding change in prices at all. It is quite permissible to speak of an inertia of prices in this sense. Even the statement that the closing price forms the starting point for the transactions of the next market*26 may be accepted if it is understood in the sense suggested above. If the general conditions that determined yesterday's price have altered but little during the night, today's price should be but little different from that of yesterday, and in practice it does not seem incorrect to make yesterday's the starting point. Nevertheless, there is no causal connection between past and present prices as far as the relative exchange ratios of economic goods (not including money) are concerned. The fact that the price of beer was high yesterday cannot be of the smallest significance as far as today's price is concerned—we need only think of the effect upon the prices of alcoholic drinks that would follow a general triumph of the Prohibition movement. Anybody who devotes attention to market activities is daily aware of alterations in the exchange ratios of goods, and it is quite impossible for anybody who is well acquainted with economic phenomena to accept a theory which seeks to explain price changes by a supposed constancy of prices.

II.8.12
It may incidentally be remarked that to trace the determination of prices back to their supposed inertia, as even Zwiedineck in his pleadings for this assumption is obliged to admit, is to resign at the outset any hope of explaining the ultimate causes of prices and to be content with explanations from secondary causes.*27 It must unreservedly be admitted that an explanation of the earliest forms of exchange transaction that can be shown to have existed—a task to the solution of which the economic historian has so far contributed but little would show that the forces that counteract sudden changes in prices were once stronger than they are now. But it must positively be denied that there is any sort of connection between those early prices and those of the present day; that is, if there really is

anybody who believes it possible to maintain the assertion that the exchange ratios of economic goods (not the money prices) that prevail today on the German stock exchanges are in any sort of causal connection with those that were valid in the days of Hermann or Barbarossa. If all the exchange ratios of the past were erased from human memory, the process of market-price determination might certainly become more difficult, because everybody would have to construct a new scale of valuations for himself; but it would not become impossible. In fact, people the whole world over are engaged daily and hourly in the operation from which all prices result: the decision as to the relative significance enjoyed by specific quantities of goods as conditions for the satisfaction of wants.

II.8.13

It is so far as the money prices of goods are determined by monetary factors, that a historically continuous component is included in them, without which their actual level could not be explained. This component, too, is derived from exchange ratios which can be entirely explained by reference to the subjective valuations of the individuals taking part in the market, even though these valuations were not originally grounded upon the specifically monetary utility alone of these goods. The valuation of money by the market can only start from a value possessed by the money in the past, and this relationship influences the new level of the objective exchange value of money. The historically transmitted value is transformed by the market without regard to what has become its historical content.*28 But it is not merely the starting point for today's objective exchange value of money; it is an indispensable element in its determination. The individual must take into account the objective exchange value of money, as determined in the market yesterday, before he can form an estimate of the quantity of money that he needs today. The demand for money and the supply of it are thus influenced by the value of money in the past; but they in their turn modify this value until they are brought into equilibrium.

II.8.14

4 The Applicability of the Marginal-Utility Theory to Money

Demonstration of the fact that search for the determinants of the objective exchange value of money always leads us back to a point where the value of money is not determined in any way by its use as a medium of exchange, but solely by its other functions, prepares the way for developing a complete theory of the value of money on the basis of the subjective theory of value and its peculiar doctrine of marginal utility.

II.8.15

Until now the subjective school has not succeeded in doing this. In fact, among the few of its members who have paid any attention at all to the problem there have been some who have actually attempted to demonstrate its insolubility. The subjective theory of value has been helpless in face of the task here confronting it.

II.8.16

There are two theories of money which, whatever else we may think of them, must be acknowledged as having attempted to deal with the whole problem of the value of money.

II.8.17

The objective theories of value succeeded in introducing a formally unexceptionable theory of money into their systems, which deduces the value of money from its cost of production.*29 It is true that the abandonment of this monetary theory is not merely to be ascribed to those shortcomings of the objective theory of value in general which led to its supersession by the theory of the modern school. Apart from this fundamental weakness, the cost-of-production theory of the value of money exhibited one feature that was an easy target for criticism. While it certainly provided a theory of commodity money (even if only a formally correct one), it was unable to deal with the problem of credit money and fiat money. Nevertheless, it was a complete theory of money insofar as it did at least attempt to give a full explanation of the value of commodity money.

II.8.18

The other similarly complete theory of the value of money is that version of the quantity theory associated with the name of Davanzati.*30 According to this theory, all the things that are able to satisfy human wants are conventionally equated with all the monetary metal. From this, since what is true of the whole is also true of its parts, the exchange ratios

between commodity units and units of money can be deduced. Here we are confronted with a hypothesis that is not in any way supported by facts. To demonstrate its untenability once more would nowadays be a waste of time. Nevertheless, it must not be overlooked that Davanzati was the first who attempted to present the problem as a whole and to provide a theory that would explain not merely the variations in an existing exchange ratio between money and other economic goods, but also the origin of this ratio.

II.8.19

The same cannot be said of other versions of the quantity theory. These all tacitly assume a certain value of money as given, and absolutely refuse to investigate further into the matter. They overlook the fact that what is required is an explanation of what determines the exchange ratio between money and commodities, and not merely of what causes changes in this ratio. In this respect, the quantity theory resembles various general theories of value (many versions of the doctrine of supply and demand, for example), which have not attempted to explain price as such but have been content to establish a law of price variations.*31 These forms of the quantity theory are in fact nothing but the application of the law of supply and demand to the problem of the value of money. They introduce into monetary theory all the strong points of this doctrine; and of course all its weak points as well.*32

II.8.20

The revolution in economics since 1870 has not yet been any more successful in leading to an entirely satisfactory solution of this problem. Of course, this does not mean that the progress of the science has left no trace on monetary theory in general and on the theory of the value of money in particular. It is one of the many services of the subjective theory of value to have prepared the way for a deeper understanding of the nature and value of money. The investigations of Menger have placed the theory on a new basis. But till now one thing has been neglected. Neither Menger nor any of the many investigators who have tried to follow him have even so much as attempted to solve the fundamental problem of the value of money. Broadly speaking, they have occupied themselves with checking and developing the traditional views and here and there expounding them more correctly and precisely, but they have not provided an answer to the question: What are the determinants of the objective exchange value of money? Menger and Jevons have not touched upon the problem at all. Carver*33 and Kinley*34 have contributed nothing of real importance to its solution. Walras*35 and Kemmerer*36 assume a given value of money and develop what is merely a theory of variations in the value of money. Kemmerer, it is true, approaches very close to a solution of the problem but passes it by.

II.8.21

Wieser expressly refers to the incomplete nature of the previous treatment. In his criticism of the quantity theory he argues that the law of supply and demand in its older form, the application of which to the problem of money constitutes the quantity theory, has a very inadequate content, since it gives no explanation at all of the way in which value is really determined or of its level at any given time, but confines itself without any further explanation merely to stating the direction in which value will move in consequence of variations in supply or demand; that is, in an opposite direction to changes in the former and in the same direction as changes in the latter. He further argues that it is no longer possible to rest content with a theory of the economic value of money which deals so inadequately with the problem; that since the supersession of the old law of supply and demand as applied to commodities, the case for which it was originally constructed, a more searching law must also be sought to apply to the case of money.*37 But Wieser does not deal with the problem whose solution he himself states to be the object of his investigation, for in the further course of his argument he declares that the concepts of supply of money and demand for money as a medium of exchange are useless for his purpose and puts forward a theory which attempts to explain variations in the objective exchange value of money (objektive innere Tauschwert des Geldes)*38 by reference to the relationship that exists in an economic community between money income and real income. For while it is true that reference to the ratio between money income and real income may well serve to explain variations in the objective exchange value of money, Wieser nowhere makes the attempt to evolve a complete theory of money—an attempt which, admittedly, the factors of supply and demand being excluded from consideration, would be certain to fail. The very objection that he raises against the old quantity theory, that it affirms nothing concerning the actual determination of value or the level at which it must be established at any time, must also be raised against his own doctrine; and this is all the more striking inasmuch as it was Wieser who, by revealing

the historical element in the purchasing power of money, laid the foundation for the further development of the subjective theory of the value of money.

II.8.22

The unsatisfactory results offered by the subjective theory of value might seem to justify the opinion that this doctrine and especially its proposition concerning the significance of marginal utility must necessarily fall short as a means of dealing with the problem of money. Characteristically enough, it was a representative of the new school, Wicksell, who first expressed this opinion. Wicksell considers that the principle which lies at the basis of all modern investigation into the theory of value, namely, the concept of marginal utility, may well be suited to explaining the determination of exchange ratios between one commodity and another, but that it has practically no significance at all, or at most an entirely secondary significance, in explaining the exchange ratios between money and other economic goods. Wicksell, however, does not appear to detect any sort of objection to the marginal-utility theory in this assertion. According to his argument, the objective exchange value of money is not determined at all by the processes of the market in which money and the other economic goods are exchanged. If the money price of a single commodity or group of commodities is wrongly assessed in the market, then the resulting maladjustments of the supply and demand and the production and consumption of this commodity or group of commodities will sooner or later bring about the necessary correction. If, on the other hand, all commodity prices, or the average price level, should for any reason be raised or lowered, there is no factor in the circumstances of the commodity market that could bring about a reaction. Consequently, if there is to be any reaction at all against a price assessment that is either too high or too low it must in some way or other originate outside the commodity market. In the further course of his argument, Wicksell arrives at the conclusion that the regulator of money prices is to be sought in the relations of the commodity market to the money market, in the broadest sense of the term. The cause which influences the demand for raw materials, labor, the use of land, and other means of production, and thus indirectly determines the upward or downward movement of commodity prices, is the ratio between the money rate of interest (Darlehnszins) and the "natural" or equilibrium rate of interest (natürliche Kapitalzins), by which we are to understand that rate of interest which would be determined by supply and demand if real capital was itself lent directly without the intermediation of money.*39

II.8.23

Wicksell imagines that this argument of his provides a theory of the determination of the objective exchange value of money. In fact, however, all that he attempts to prove is that forces operate from the loan market on the commodity market which prevent the objective exchange value of money from rising too high or falling too low. He never asserts that the rate of interest on loans determines the actual level of this value in any way; in fact, to assert this would be absurd. But if we are to speak of a level of money prices that is "too high" or "too low," we must first state how the ideal level with which the actual level is compared has been established. It is in no way sufficient to show that the position of equilibrium is returned to after any disturbance, if the existence of this position of equilibrium is not first explained. Indubitably, this is the primary problem, and its solution leads directly to that of the other; without it, further inquiry must remain unfruitful, for the state of equilibrium can only be maintained by those forces which first established it and continue to reestablish it. If the circumstances of the loan market can provide no explanation of the genesis of the exchange ratio subsisting between money and other economic goods, then neither can they help to explain why this ratio does not alter. The objective exchange value of money is determined in the market where money is exchanged for commodities and commodities for money. To explain its determination is the task of the theory of the value of money. But Wicksell is of the opinion that "the laws of the exchange of commodities contain in themselves nothing that could determine the absolute level of money prices."*40 This amounts to a denial of all possibility of scientific investigation in this sphere.

II.8.24

Helfferich also is of the opinion that there is an insurmountable obstacle in the way of applying the marginal-utility theory to the problem of money; for while the marginal-utility theory attempts to base the exchange value of goods on the degree of their utility to the individual, the degree of utility of money to the individual quite obviously depends on its exchange value, since money can have utility only if it has exchange value, and the degree of the utility is determined by the level of the exchange value. Money is valued subjectively according to the amount of consumable goods that can be obtained in exchange for it, or

according to what other goods have to be given in order to obtain the money needed for making payments. The marginal utility of money to any individual, that is, the marginal utility derivable from the goods that can be obtained with the given quantity of money or that must be surrendered for the required money, presupposes a certain exchange value of the money; so the latter cannot be derived from the former.*41

II.8.25

Those who have realized the significance of historically transmitted values in the determination of the objective exchange value of money will not find great difficulty in escaping from this apparently circular argument. It is true that valuation of the monetary unit by the individual is possible only on the assumption that an exchange ratio already exists in the market between the money and other economic goods. Nevertheless, it is erroneous to deduce from this that a complete and satisfactory explanation of the determination of the objective exchange value of money cannot be provided by the marginal-utility theory. The fact that this theory is unable to explain the objective exchange value of money entirely by reference to its monetary utility; that to complete its explanation, as we were able to show, it is obliged to go back to that original exchange value which was based not on a monetary function at all but on other uses of the object that was to be used as money—this must not in any way be reckoned to the discredit of the theory, for it corresponds exactly to the nature and origin of the particular objective exchange value under discussion. To demand of a theory of the value of money that it should explain the exchange ratio between money and commodities solely with reference to the monetary function, and without the assistance of the element of historical continuity in the value of money, is to make demands of it that run quite contrary to its nature and its proper task.

II.8.26

The theory of the value of money as such can trace back the objective exchange value of money only to that point where it ceases to be the value of money and becomes merely the value of a commodity. At this point the theory must hand over all further investigation to the general theory of value, which will then find no further difficulty in the solution of the problem. It is true that the subjective valuation of money presupposes an existing objective exchange value; but the value that has to be presupposed is not the same as the value that has to be explained; what has to be presupposed is yesterday's exchange value, and it is quite legitimate to use it in an explanation of that of today. The objective exchange value of money which rules in the market today is derived from day's under the influence of the subjective valuations of the individuals frequenting the market, just as yesterday's in its turn was derived under the influence of subjective valuations from the objective exchange value possessed by the money the day before yesterday.

II.8.27

If in this way we continually go farther and farther back we must eventually arrive at a point where we no longer find any component in the objective exchange value of money that arises from valuations based on the function of money as a common medium of exchange; where the value of money is nothing other than the value of an object that is useful in some other way than as money. But this point is not merely an instrumental concept of theory; it is an actual phenomenon of economic history, making its appearance at the moment when indirect exchange begins.

II.8.28

Before it was usual to acquire goods in the market, not for personal consumption, but simply in order to exchange them again for the goods that were really wanted, each individual commodity was only accredited with that value given by the subjective valuations based on its direct utility. It was not until it became customary to acquire certain goods merely in order to use them as media of exchange that people began to esteem them more highly than before, on account of this possibility of using them in indirect exchange. The individual valued them in the first place because they were useful in the ordinary sense, and then additionally because they could be used as media of exchange. Both sorts of valuation are subject to the law of marginal utility. Just as the original starting point of the value of money was nothing but the result of subjective valuations, so also is the present-day value of money.

II.8.29

But Helfferich manages to bring forward yet another argument for the inapplicability of the marginal-utility theory to money. Looking at the economic system as a whole, it is clear that

the notion of marginal utility rests on the fact that, given a certain quantity of goods, only certain wants can be satisfied and only a certain set of utilities provided. With given wants and a given set of means, the marginal degree of utility is determined also. According to the marginal-utility theory, this fixes the value of the goods in relation to the other goods that are offered as an equivalent in exchange, and fixes it in such a manner that that part of the demand that cannot be satisfied with the given supply is excluded by the fact that it is not able to offer an equivalent corresponding to the marginal utility of the good demanded. Now Helfferich objects that while the existence of a limited supply of any goods except money is in itself sufficient to imply the limitation of their utility also, this is not true of money. The utility of a given quantity of money depends directly upon the exchange value of the money, not only from the point of view of the individual, but also for society as a whole. The higher the value of the unit in relation to other goods, the greater will be the quantity of these other goods that can be paid for by means of the same sum of money. The value of goods in general results from the limitation of the possible utilities that can be obtained from a given supply of them, and while it is usually higher according to the degree of utility which is excluded by the limitation of supply, the total utility of the supply itself cannot be increased by an increase in its value; but in the case of money, the utility of a given supply can be increased at will by an increase in the value of the unit.*42

II.8.30

The error in this argument is to be found in its regarding the utility of money from the point of view of the community instead of from that of the individual. Every valuation must emanate from somebody who is in a position to dispose in exchange of the object valued. Only those who have a choice between two economic goods are able to form a judgment as to value, and they do this by preferring the one to the other. If we start with valuations from the point of view of society as a whole, we tacitly assume the existence of a socialized economic organization in which there is no exchange and in which the only valuations are those of the responsible official body. Opportunities for valuation in such a society would arise in the control of production and consumption, as, for example, in deciding how certain production goods were to be used when there were alternative ways of using them. But in such a society there would be no room at all for money. Under such conditions, a common medium of exchange would have no utility and consequently no value either. It is therefore illegitimate to adopt the point of view of the community as a whole when dealing with the value of money. All consideration of the value of money must obviously presuppose a state of society in which exchange takes place and must take as its starting point individuals acting as independent economic agents within such a society,*43 that is to say, individuals engaged in valuing things.

II.8.31

5 "Monetary" and "Nonmonetary" Influences Affecting the Objective Exchange Value of Money

Now, the first part of the problem of the value of money having been solved, it is at last possible for us to evolve a plan of further procedure. We no longer are concerned to explain the origin of the objective exchange value of money; this task has already been performed in the course of the preceding investigation. We now have to establish the laws which govern variations in existing exchange ratios between money and the other economic goods. This part of the problem of the value of money has occupied economists from the earliest times, although it is the other that ought logically to have been dealt with first. For this reason, as well as for many others, what has been done toward its elucidation does not amount to very much. Of course, this part of the problem is also much more complicated than the first part.

II.8.32

In investigations into the nature of changes in the value of money it is usual to distinguish between two sorts of determinants of the exchange ratio that connects money and other economic goods; those that exercise their effect on the money side of the ratio and those that exercise their effect on the commodity side. This distinction is extremely useful; without it, in fact, all attempts at a solution would have to be dismissed beforehand as hopeless. Nevertheless its true meaning must not be forgotten.

II.8.33

The exchange ratios between commodities—and the same is naturally true of the exchange ratios between commodities and money—result from determinants which affect both terms

of the exchange ratio. But existing exchange ratios between goods may be modified by a change in determinants connected only with one of the two sets of exchanged objects. Although all the factors that determine the valuation of a good remain the same, its exchange ratio with another good may alter if the factors that determine the val uation of this second good alter. If of two persons I prefer A to B, this preference may be reversed, even though my feeling for A remains unchanged, if I contract a closer friendship with B. Similarly with the relationships between goods and human beings. He who today prefers the consumption of a cup of tea to that of a dose of quinine may make a contrary valuation tomorrow, even though his liking for tea has not diminished, if he has, say, caught a fever overnight. Whereas the factors that determine prices always affect both sets of the goods that are to be exchanged, those of them which merely modify existing prices may sometimes be restricted to one set of goods only.*44

II.8.34

(II) Fluctuations in the Objective Exchange Value of Money Evoked by Changes in the Ratio Between the Supply of Money and the Demand for It

6 The Quantity Theory

That the objective exchange value of money as historically transmitted (der geschichtlich überkommene objektive Tauschwert des Geldes) is affected not only by the industrial use of the material from which it is made, but also by its monetary use, is a proposition which hardly any economist would nowadays deny. It is true that lay opinion was molded entirely by the contrary belief until very recent times. To a naive observer, money made out of precious metal was "sound money" because the piece of precious metal was an "intrinsically" valuable object, while paper money was "bad money" because its value was only "artificial." But even the layman who holds this opinion accepts the money in the course of business transactions, not for the sake of its industrial use-value, but for the sake of its objective exchange value, which depends largely upon its monetary employment. He values a gold coin not merely for the sake of its industrial use-value, say because of the possibility of using it as jewelry, but chiefly on account of its monetary utility. But, of course, to do something, and to render an account to oneself of what one does and why one does it, are quite different things.*45

II.8.35

Judgment upon the shortcomings of popular views about money and its value must be lenient, for even the attitude of science toward this problem has not always been free from error. Happily, the last few years have seen a gradual but definite change in popular monetary theory. It is now generally recognized that the value of money depends partly on its monetary function. This is due to the increased attention that has been devoted to questions of monetary policy since the commencement of the great controversy about the standards. The old theories proved unsatisfactory; it was not possible to explain phenomena such as those of the Austrian or Indian currency systems without invoking the assumption that the value of money originates partly in its monetary function. The naivety of the numerous writings which attacked this opinion and their complete freedom from the restraining influence of any sort of knowledge of the theory of value may occasionally lead the economist to regard them as unimportant; but they may at least claim to have performed the service of shaking deep-rooted prejudices and stimulating a general interest in the problem of prices. No doubt they are a gratifying indication of a growing interest in economic questions; if this is kept in mind, it is possible to think more generously of many erroneous monetary theories.

II.8.36

It is true that there has been no lack of attempts to explain the peculiar phenomena of modern monetary systems in other ways. But they have all been unsuccessful. Thus, in particular, Laughlin's theory comes to grief in failing to take account of the special aspects of the value of money that are associated with the specifically monetary function. Quite correctly, Laughlin stresses as the peculiar characteristic of money substitutes their constant and immediate convertibility into money.*46 Nevertheless, he would seem to be mistaken on a fundamental point when he applies the name of token money to such currencies as the rupee from 1893 to 1899 and the Russian ruble and Austrian gulden at the time of the

suspension of cash payments. He accounts for the fact that a piece of paper which is not immediately convertible into gold can have any value at all, by reference to the possibility that it will nevertheless someday be converted. He compares inconvertible paper money with the shares of a concern which is temporarily not paying any dividend but whose shares may nevertheless have a certain exchange value because of the possibility of future dividends. And he says that the fluctuations in the exchange value of such paper money are consequently based upon the varying prospects of its ultimate conversion.*47

II.8.37
The error in this conclusion may be most simply demonstrated by means of an actual example. Let us select for this purpose the monetary history of Austria, which Laughlin also uses as an illustration. From 1859 onward the Austrian National Bank was released from the obligation to convert its notes on demand into silver, and nobody could tell when the state paper money issued in 1866 would be redeemed, or even if it would be redeemed at all. It was not until the later 1890s that the transition to metallic money was completed by the actual resumption of cash payments on the part of the Austro-Hungarian Bank.

II.8.38
Now Laughlin attempts to explain the value of the Austrian currency during this period by reference to the prospect of a future conversion of the notes into metallic commodity money. He finds the basis of its value, at first in an expectation that it would be converted into silver, and afterward in an expectation that it would be converted into gold, and traces the vicissitudes of its purchasing power to the varying chances of its ultimate conversion.*48

II.8.39
The inadmissibility of this argument can be demonstrated in a striking fashion. In the year 1884—the year is chosen at random—the five percent Austrian government bonds were quoted on the Viennese Stock Exchange at an average rate of 95.81, or 4.19 percent below par. The quotation was in terms of Austrian paper gulden. The government bonds represented claims against the Austrian state bearing interest at five percent. Thus both the bonds and the notes were claims against the same debtor. It is true that these government bonds were not repayable, that is to say, not redeemable on the part of the creditor. Nevertheless, seeing that interest was paid on them, this could not prejudice their value in comparison with that of the non-interest-bearing currency notes, which also were not redeemable; furthermore, the interest on the bonds was payable in paper money, and, if the government redeemed them, it could do this also in paper money. In fact, the bonds in question were redeemed voluntarily in 1892, long before the currency notes were converted into gold. The question now arises: How could it come about that the government bonds, bearing interest at five percent, could be valued less highly than the non-interest-bearing currency notes? This could not possibly be attributed, say, to the fact that people hoped that the currency notes would be converted into gold before the bonds were redeemed. There was no suggestion of such an expectation. Quite another circumstance decided the matter.

II.8.40
The currency notes were common media of exchange—they were money—and consequently, besides the value that they possessed as claims against the state, they also had a value as money. It is beyond doubt that their value as claims alone would not have been an adequate basis even for a relatively large proportion of their actual exchange value. The date of repayment of the claims that were embodied in these notes was in fact quite uncertain, but in any case very distant. As claims, it was impossible for them to have a higher exchange value than corresponded to the then value of the expectation of their repayment. Now, after the cessation of free coinage of silver it was fairly obvious that the paper gulden (and incidentally the silver gulden) would not be converted at a rate appreciably in excess of the average rate at which it circulated in the period immediately preceding the conversion. In any case, after the legal determination of the conversion ratio by the Currency Regulation Law of August 2, 1892, it was settled that the conversion of the currency notes would not take place at any higher rate than this. How could it come about, then, that the gold value of the krone (the half-gulden) already fluctuated about this rate as early as the second half of the year 1892 although the date of conversion was then still quite unknown? Usually a claim to a fixed sum, the date of payment of which lies in the uncertain future, is valued considerably less highly than the sum to which it refers. To this question Laughlin's theory cannot offer an answer; only by taking account of the fact that the monetary function also contributes toward value is it possible to find a satisfactory explanation.

II.8.41
The attempts that have so far been made, to determine the quantitative significance of the forces emanating from the side of money that affect the exchange ratio existing between money and other economic goods, have followed throughout the line of thought of the quantity theory. This is not to say that all the exponents of the quantity theory had realized that the value of money is not determined solely by its nonmonetary, industrial employment, but also or even solely by its monetary function. Many quantity theorists have been of another opinion on this point and have believed that the value of money depends solely on the industrial employment of the monetary material. The majority have had no clear conception of the question at all; very few have approached its true solution. It is often hard to decide in which class certain of these authors should be placed; their phraseology is often obscure and their theories not seldom contradictory. All the same, let us suppose that all quantity theorists had recognized the significance of the monetary function in the determination of the value of the monetary material, and criticize the usefulness of their theory from this point of view.

II.8.42
When the determinants of the exchange ratios between economic goods were first inquired into, attention was early devoted to two factors whose importance for the pricing process was not to be denied. It was impossible to overlook the well-known connection between variations in the available quantity of goods and variations in prices, and the proposition was soon formulated that a good would rise in price if the available quantity of it diminished. Similarly, the importance of the total volume of transactions in the determination of prices was also realized. Thus, a mechanical theory of price determination was arrived at—the doctrine of supply and demand, which until very recently held such a prominent position in our science. Of all explanations of prices it is the oldest. We cannot dismiss it offhand as erroneous; the only valid objection to it is that it does not go back to the ultimate determinants of prices. It is correct or incorrect, according to the content given to the words demand and supply. It is correct, if account is taken of all the factors that motivate people in buying and selling. It is incorrect, if supply and demand are interpreted and compared in a merely quantitative sense.*49

II.8.43
It was an obvious step to take this theory, that had been constructed to explain the reciprocal exchange ratios of commodities, and apply it to fluctuations in the relative values of commodities and money also. As soon as people became conscious of the fact of variations in the value of money at all, and gave up the naive conception of money as an invariable measure of value, they began to explain these variations also by quantitative changes in supply and demand.

II.8.44
It is true that the usual criticism of the quantity theory (often expressed with more resentment than is consonant with that objectivity which alone should be the distinctive mark of scientific investigation) had an easy task so far as it was leveled against the older, incomplete, version. It was not difficult to prove that the supposition that changes in the value of money must be proportionate to changes in the quantity of money, so that for example a doubling of the quantity of money would lead to a doubling of prices also, was not in accordance with facts and could not be theoretically established in any way whatever.*50 It was still simpler to show the untenability of the naive version of the theory which regarded the total quantity of money and the total stock of money as equivalent.

II.8.45
But all these objections do not touch the essence of the doctrine. Neither can any sort of refutation or limitation of the quantity theory be deduced from the fact that a number of writers claim validity for it only on the assumption ceteris paribus; not even though they state further that this supposition never is fulfilled and never could be fulfilled.*51 The assumption ceteris paribus is the self-evident appendage of every scientific doctrine and there is no economic law that can dispense with it.

II.8.46
Against such superficial criticism the quantity theory has been well able to defend itself triumphantly, and through the centuries, condemned by some and exalted as an indisputable truth by others, it has always been in the very center of scientific discussion. It has been dealt with in an immense literature, far beyond the power of any one person to master. It is

true that the scientific harvest of these writings is but small. The theory has been adjudged "right" or "wrong," and statistical data (mostly incomplete and incorrectly interpreted) have been used both to "prove" and to "disprove" it—although sufficient care has seldom been taken to eliminate variations brought about by accidental circumstances. On the other hand, investigation on a basis of the theory of value has but seldom been attempted.

II.8.47

If we wish to arrive at a just appraisal of the quantity theory we must consider it in the light of the contemporary theories of value. The core of the doctrine consists in the proposition that the supply of money and the demand for it both affect its value. This proposition is probably a sufficiently good hypothesis to explain big changes in prices; but it is far from containing a complete theory of the value of money. It describes one cause of changes in prices; it is nevertheless inadequate for dealing with the problem exhaustively. By itself it does not comprise a theory of the value of money; it needs the basis of a general value theory. One after another, the doctrine of supply and demand, the cost-of-production theory, and the subjective theory of value have had to provide the foundations for the quantity theory.

II.8.48

If we make use in our discussion of only one fundamental idea contained in the quantity theory, the idea that a connection exists between variations in the value of money on the one hand and variations in the relations between the demand for money and the supply of it on the other hand, our reason is not that this is the most correct expression of the content of the theory from the historical point of view, but that it constitutes that core of truth in the theory which even the modern investigator can and must recognize as useful. Although the historian of economic theory may find this formulation inexact and produce quotations to refute it, he must nevertheless admit that it contains the correct expression of what is valuable in the quantity theory and usable as a cornerstone for a theory of the value of money.

II.8.49

Beyond this proposition, the quantity theory can provide us with nothing. Above all, it fails to explain the mechanism of variations in the value of money. Some of its expositors do not touch upon this question at all; the others employ an inadequate principle for dealing with it. Observation teaches us that certain relations of the kind suggested between the available stock of money and the need for money do in fact exist; the problem is to deduce these relations from the fundamental laws of value and so at last to comprehend their true significance.

II.8.50

7 The Stock of Money and the Demand for Money

The process, by which supply and demand are accommodated to each other until a position of equilibrium is established and both are brought into quantitative and qualitative coincidence, is the higgling of the market. But supply and demand are only the links in a chain of phenomena, one end of which has this visible manifestation in the market, while the other is anchored deep in the human mind. The intensity with which supply and demand are expressed, and consequently the level of the exchange ratio at which both coincide, depends on the subjective valuations of individuals. This is true, not only of the direct exchange ratios between economic goods other than money, but also of the exchange ratio between money on the one hand and commodities on the other.

II.8.51

For a long time it was believed that the demand for money was a quantity determined by objective factors and independently of subjective considerations. It was thought that the demand for money in an economic community was determined, on the one hand by the total quantity of commodities that had to be paid for during a given period, and on the other hand by the velocity of circulation of the money. There is an error in the very starting point of this way of regarding the matter, which was first successfully attacked by Menger.*52 It is inadmissible to begin with the demand for money of the community. The individualistic economic community as such, which is the only sort of community in which there is a demand for money, is not an economic agent. It demands money only insofar as its individual members demand money. The demand for money of the economic community is

nothing but the sum of the demands for money of the individual economic agents composing it. But for individual economic agents it is impossible to make use of the formula: total volume of transactions ÷ velocity of circulation. If we wish to arrive at a description of the demand for money of an individual we must start with the considerations that influence such an individual in receiving and paying out money.

II.8.52
Every economic agent is obliged to hold a stock of the common medium of exchange sufficient to cover his probable business and personal requirements. The amount that will be required depends upon individual circumstances. It is influenced both by the custom and habits of the individual and by the organization of the whole social apparatus of production and exchange.

II.8.53
But all of these objective factors always affect the matter only as motivations of the individual. They are never capable of a direct influence upon the actual amount of his demand for money. Here, as in all departments of economic life, it is the subjective valuations of the separate economic agents that alone are derisive. The store of purchasing power held by two such agents whose objective economic circumstances were identical might be quite different if the advantages and disadvantages of such a store were estimated differently by the different agents.

II.8.54
The cash balance held by an individual need by no means consist entirely of money. If secure claims to money, payable on demand, are employed commercially as substitutes for money, being tendered and accepted in place of money, then individuals' stores of money can be entirely or partly replaced by a corresponding store of these substitutes. In fact, for technical reasons (such, for example, as the need for having money of various denominations on hand) this may sometimes prove an unavoidable necessity. It follows that we can speak of a demand for money in a broader and in a narrower sense. The former comprises the entire demand of an individual for money and money substitutes; the second, merely his demand for money proper. The former is determined by the will of the economic agent in question. The latter is fairly independent of individual influences, if we disregard the question of denomination referred to above. Apart from this, the question whether a greater or smaller part of the cash balance held by an individual shall consist of money substitutes is only of importance to him when he has the opportunity of acquiring money substitutes which bear interest, such as interest-bearing banknotes—a rare case—or bank deposits. In all other cases it is a matter of complete indifference to him.

II.8.55
The individual's demand and stock of money are the basis of the demand and stock in the whole community. So long as there are no money substitutes in use, the social demand for money and the social stock of money are merely the respective sums of the individual demands and stocks. But this is changed with the advent of money substitutes. The social demand for money in the narrower sense is no longer the sum of the individual demands for money in the narrower sense, and the social demand for money in the broader sense is by no means the sum of the individual demands for money in the broader sense. Part of the money substitutes functioning as money in the cash holdings of individuals are "covered" by sums of money held as "redemption funds" at the place where the money substitutes are cashable, which is usually, although not necessarily, the issuing concern. We shall use the term money certificates for those money substitutes that are completely covered by the reservation of corresponding sums of money, and the term fiduciary media*53 for those which are not covered in this way. The suitability of this terminology, which has been chosen with regard to the problem to be dealt with in the third part of the present work, must be demonstrated in that place. It is not to be understood in the light of banking technique or in a juristic sense; it is merely intended to serve the ends of economic argument.

II.8.56
Only in the rarest cases can any particular money substitutes be immediately assigned to the one or the other group. That is possible only for those money substitutes of which the whole species is either entirely covered by money or not covered by money at all. In the case of all other money substitutes, those the total quantity of which is partly covered by money and partly not covered by money, only an imaginary ascription of an aliquot part to each of the two groups can take place. This involves no fresh difficulty. If, for example, there are

banknotes in circulation one-third of the quantity of which is covered by money and two-thirds not covered, then each individual note is to be reckoned as two-thirds fiduciary medium and one-third money certificate. It is thus obvious that a community's demand for money in the broader sense cannot be the sum of the demands of individuals for money and money substitutes, because to reckon in the demand for money certificates as well as that for the money that serves as a cover for them as the banks and elsewhere is to count the same amount twice over. A community's demand for money in the broader sense is the sum of the demands of the individual economic agents for money proper and fiduciary media (including the demand for cover). And a community's demands for money in the narrower sense are the sum of the demands of the individual economic agents for money and money certificates (this time not including cover).

II.8.57
In this part we shall ignore the existence of fiduciary media and assume that the demands for money of individual economic agents can be satisfied merely by money and money certificates, and consequently that the demand for money of the whole economic community can be satisfied merely by money proper.*54 The third part of this book is devoted to an examination of the important and difficult problems arising from the creation and circulation of fiduciary media.

II.8.58
The demand for money and its relations to the stock of money form the starting point for an explanation of fluctuations in the objective exchange value of money. Not to understand the nature of the demand for money is to fail at the very outset of any attempt to grapple with the problem of variations in the value of money. If we start with a formula that attempts to explain the demand for money from the point of view of the community instead of from that of the individual, we shall fail to discover the connection between the stock of money and the subjective valuations of individuals—the foundation of all economic activity. But on the other hand, this problem is solved without difficulty if we approach the phenomena from the individual agent's point of view.

II.8.59
No longer explanation is necessary, of the way in which an individual will behave in the market when his demand for money exceeds his stock of it. He who has more money on hand than he thinks he needs, will buy, in order to dispose of the superfluous stock of money that lies useless on his hands. If he is an entrepreneur, he will possibly enlarge his business. If this use of the money is not open to him, he may purchase interest-bearing securities; or possibly he may decide to purchase consumption goods. But in any case, he expresses by a suitable behavior in the market the fact that he regards his reserve of purchasing power as too large.

II.8.60
And he whose demand for money is less than his stock of it will behave in an exactly contrary fashion. If an individual's stock of money diminishes (his property or income remaining the same), then he will take steps to reach the desired level of reserve purchasing power by suitable behavior in making sales and purchases. A shortage of money means a difficulty in disposing of commodities for money. He who is obliged to dispose of a commodity by way of exchange will prefer to acquire some of the common medium of exchange for it, and only when this acquisition involves too great a sacrifice will he be content with some other economic good, which will indeed be more marketable than that which he wishes to dispose of but less marketable than the common medium of exchange. Under the present organization of the market, which leaves a deep gulf between the marketability of money on the one hand and the marketability of other economic goods on the other hand, nothing but money enters into consideration at all as a medium of exchange. Only in exceptional circumstances is any other economic good pressed into this service. In the case mentioned, therefore, every seller will be willing to accept a smaller quantity of money than he otherwise would have demanded, so as to avoid the fresh loss that he would have to suffer in again exchanging the commodity that he has acquired, which is harder to dispose of than money, for the commodity that he actually requires for consumption.

II.8.61
The older theories, which started from an erroneous conception of the social demand for money, could never arrive at a solution of this problem. Their sole contribution is limited to paraphrases of the proposition that an increase in the stock of money at the disposal of the

community while the demand for it remains the same decreases the objective exchange value of money, and that an increase of the demand with a constant available stock has the contrary effect, and so on. By a flash of genius, the formulators of the quantity theory had already recognized this. We cannot by any means call it an advance when the formula giving the amount of the demand for money (volume of transactions ÷ velocity of circulation) was reduced to its elements, or when the attempt was made to give exact precision to the idea of a stock of money, so long as this occurred under a misapprehension of the nature of fiduciary media and of clearing transactions. No approach whatever was made toward the central problem of this part of the theory of money so long as theorists were unable to show the way in which subjective valuations are affected by variations in the ratio between the stock of money and the demand for money. But this task was necessarily beyond the power of these theories; they break down at the crucial point.*55

II.8.62

Recently, Wieser has expressed himself against employing the "collective concept of the demand for money" as the starting point for a theory of fluctuations in the objective exchange value of money. He says that in an investigation of the value of money we are not concerned with the total demand for money. The demand for money to pay taxes with, for example, does not come into consideration, for these payments do not affect the value of money but only transfer purchasing power from those who pay the taxes to those who receive them. In the same way, capital and interest payments in loan transactions and the making of gifts and bequests merely involve a transference of purchasing power between persons and not an augmentation or diminution of it. A functional theory of the value of money must, in stating its problem, have regard only to those factors by which the value of money is determined. The value of money is determined in the process of exchange. Consequently the theory of the value of money must take account only of those quantifies which enter into the process of exchange.*56

II.8.63

But these objections of Wieser's are not only rebutted by the fact that even the surrender of money in paying taxes, in making capital and interest payments, and in giving presents and bequests, falls into the economic category of exchange. Even if we accept Wieser's narrow definition of exchange, we must still oppose his argument. It is not a peculiarity of money that its value (Wieser obviously means its objective exchange value) is determined in the process of exchange; the same is true of all other economic goods. For all economic goods it must therefore be correct to say that the theory of value has to investigate only certain quantities, namely, only those that are involved in the process of exchange. But there is no such thing in economics as a quantity that is not involved in the process of exchange. From the economic point of view, a quantity has no other relationships than those which exercise some influence upon the valuations of individuals concerned in some process or other of exchange.

II.8.64

This is true, even if we admit that value only arises in connection with exchange in the narrow sense intended by Wieser. But those who participate in exchange transactions, and consequently desire to acquire or dispose of money do not value the monetary unit solely with regard to the fact that they can use it in other acts of exchange (in Wieser's narrower sense of the expression), but also because they require money in order to pay taxes, to transfer borrowed capital and pay interest, and to make presents. They consider the level of their purchasing-power reserves with a view to the necessity of having money ready for all these purposes, and their judgment as to the extent of their requirements for money is what decides the demand for money with which they enter the market.

II.8.65

8 The Consequences of an Increase in the Quantity of Money While the Demand for Money Remains Unchanged or Does Not Increase to the Same Extent

Those variations in the ratio between the individual's demand for money and his stock of it that arise from purely individual causes cannot as a rule have a very large quantitative influence in the market. In most cases they will be entirely, or at least partly, compensated by contrary variations emanating from other individuals in the market. But a variation in the objective exchange value of money can arise only when a force is exerted in one direction that is not canceled by a counteracting force in the opposite direction. If the causes that alter

the ratio between the stock of money and the demand for it from the point of view of an individual consist merely in accidental and personal factors that concern that particular individual only, then, according to the law of large numbers, it is likely that the forces arising from this cause, and acting in both directions in the market, will counterbalance each other. The probability that the compensation will be complete is the greater, the more individual economic agents there are.

II.8.66
It is otherwise when disturbances occur in the community as a whole, of a kind to alter the ratio existing between the individual's stock of money and his demand for it. Such disturbances, of course, cannot have an effect except by altering the subjective valuations of the individual; but they are social economic phenomena in the sense that they influence the subjective valuations of a large number of individuals, if not simultaneously and in the same degree, at least in the same direction, so that there must necessarily be some resultant effect on the objective exchange value of money.

II.8.67
In the history of money a particularly important part has been played by those variations in its objective exchange value that have arisen in consequence of an increase in the stock of money while the demand for it has remained unchanged or has at least not increased to the same extent. These variations, in fact, were what first attracted the attention of economists; it was in order to explain them that the quantity theory of money was first propounded. All writers have dealt most thoroughly with them. It is perhaps justifiable, therefore, to devote special attention to them and to use them to illuminate certain important theoretical points.

II.8.68
In whatever way we care to picture to ourselves the increase in the stock of money, whether as arising from increased production or importation of the substance of which commodity money is made, or through a new issue of fiat or credit money, the new money always increases the stock of money at the disposal of certain individual economic agents. An increase in the stock of money in a community always means an increase in the money incomes of a number of individuals; but it need not necessarily mean at the same time an increase in the quantity of goods that are at the disposal of the community, that is to say, it need not mean an increase in the national dividend. An increase in the amount of fiat or credit money is only to be regarded as an increase in the stock of goods at the disposal of society if it permits the satisfaction of a demand for money which would otherwise have been satisfied by commodity money instead, since the material for the commodity money would then have had to be procured by the surrender of other goods in exchange or produced at the cost of renouncing some other sort of production. If, on the other hand, the nonexistence of the new issue of fiat or credit money would not have involved an increase in the quantity of commodity money, then the increase of money cannot be regarded as an increase of the income or wealth of society.

II.8.69
An increase in a community's stock of money always means an increase in the amount of money held by a number of economic agents, whether these are the issuers of fiat or credit money or the producers of the substance of which commodity money is made. For these persons, the ratio between the demand for money and the stock of it is altered; they have a relative superfluity of money and a relative shortage of other economic goods. The immediate consequence of both circumstances is that the marginal utility to them of the monetary unit diminishes. This necessarily influences their behavior in the market. They are in a stronger position as buyers. They will now express in the market their demand for the objects they desire more intensively than before; they are able to offer more money for the commodities that they wish to acquire. It will be the obvious result of this that the prices of the goods concerned will rise, and that the objective exchange value of money will fall in comparison.

II.8.70
But this rise of prices will by no means be restricted to the market for those goods that are desired by those who originally have the new money at their disposal. In addition, those who have brought these goods to market will have their incomes and their proportionate stocks of money increased and, in their turn, will be in a position to demand more intensively the goods they want, so that these goods will also rise in price. Thus the increase of prices

continues, having a diminishing effect, until all commodities, some to a greater and some to a lesser extent, are reached by it.*57

II.8.71
The increase in the quantity of money does not mean an increase of income for all individuals. On the contrary, those sections of the community that are the last to be reached by the additional quantity of money have their incomes reduced, as a consequence of the decrease in the value of money called forth by the increase in its quantity; this will be referred to later. The reduction in the income of these classes now starts a countertendency, which opposes the tendency to a diminution of the value of money due to the increase of income of the other classes, without being able to rob it completely of its effect.

II.8.72
Those who hold the mechanical version of the quantity theory will be the more inclined to believe that the increase in the quantity of money must eventually lead to a uniform increase in the prices of all economic goods, the less clear their concept is of the way in which the determination of prices is affected by it. Thorough comprehension of the mechanism by means of which the quantity of money affects the prices of commodities makes their point of view altogether untenable. Since the increased quantity of money is received in the first place by a limited number of economic agents only and not by all, the increase of prices at first embraces only those goods that are demanded by these persons; further, it affects these goods more than it afterward affects any others. When the increase of prices spreads farther, if the increase in the quantity of money is only a single transient phenomenon, it will not be possible for the differential increase of prices of these goods to be completely maintained; a certain degree of adjustment will take place. But there will not be such a complete adjustment of the increases that all prices increase in the same proportion. The prices of commodities after the rise of prices will not bear the same relation to each other as before its commencement; the decrease in the purchasing power of money will not be uniform with regard to different economic goods.

II.8.73
Hume, it may be remarked, bases his argument concerning this matter on the supposition that every Englishman is miraculously endowed with five pieces of gold during the night.*58 Mill rightly remarks on this, that it would not lead to a uniform increase in the demand for separate commodities; the luxury articles of the poorer classes would rise more in price than the others. All the same, he believes that a uniform increase in the prices of all commodities, and this exactly in proportion to the increase in the quantity of money, would occur, if "the wants and inclinations of the community collectively in respect to consumption" remained the same. He assumes, no less artificially than Hume, that "to every pound, or shilling, or penny, in the possession of any one, another pound, shilling, or penny were suddenly added."*59 But Mill fails to see that even in this case a uniform rise of prices would not occur, even supposing that for each member of the community the proportion between stock of money and total wealth was the same, so that the addition of the supplementary quantity of money did not result in an alteration of the relative wealth of individuals. For, even in this quite impossible case, every increase in the quantity of money would necessarily cause an alteration in the conditions of demand, which would lead to a disparate increase in the prices of the individual economic goods. Not all commodities would be demanded more intensively, and not all of those that were demanded more intensively would be affected in the same degree.*60

II.8.74
There is no justification whatever for the widespread belief that variations in the quantity of money must lead to inversely proportionate variations in the objective exchange value of money, so that, for example, a doubling of the quantity of money must lead to a halving of the purchasing power of money.

II.8.75
Even assuming that in some way or other—it is confessedly difficult to imagine in what way—very individual's stock of money were to be increased so that his relative position as regards other holders of property was unaltered, it is not difficult to prove that the subsequent variation in the objective exchange value of money would not be proportioned to the variation in the quantity of money. For, in fact, the way in which an individual values a variation in the quantity of money at his disposal is by no means directly dependent on the amount of this variation; but we should have to assume that it was, if we wished to conclude

that there would be a proportionate variation in the objective exchange value of money. If the possessor of a units of money receives b additional units, then it is not at all true to say that he will value the total stock a + b exactly as highly as he had previously valued the stock a alone. Because he now has disposal over a larger stock, he will now value each unit less than he did before; but how much less will depend upon a whole series of individual circumstances, upon subjective valuations that will be different for each individual. Two individuals who are equally wealthy and who each possess a stock of money a, will not by any means arrive at the same variation in their estimation of money after an increase of b units in each of their stocks of money. It is nothing short of absurdity to assume that, say, doubling the amount of money at the disposal of an individual must lead to a halving of the exchange value that he ascribes to each monetary unit. Let us, for example, imagine an individual who is in the habit of holding a stock of a hundred kronen and assume that a sum of a further hundred kronen is paid by somebody or other to this individual. Mere consideration of this example is sufficient to show the complete unreality of all the theories that ascribe to variations in the quantity of money a uniformly proportionate effect on the purchasing power of money. For it involves no essential modification of this example to assume that similar increases in the quantity of money are experienced by all the members of the community at once.

II.8.76

The mistake in the argument of those who suppose that a variation in the quantity of money results in an inversely proportionate variation in its purchasing power lies in its starting point. If we wish to arrive at a correct conclusion, we must start with the valuations of separate individuals; we must examine the way in which an increase or decrease in the quantity of money affects the value scales of individuals, for it is from these alone that variations in the exchange ratios of goods proceed. The initial assumption in the arguments of those who maintain the theory that changes in the quantity of money have a proportionate effect on the purchasing power of money is the proposition that if the value of the monetary unit were doubled, half of the stock of money at the disposal of the community would yield the same utility as that previously yielded by the whole stock. The correctness of this proposition is not disputed; nevertheless, it does not prove what it is meant to prove.

II.8.77

In the first place, it must be pointed out that the levels of the total stock of money and of the value of the money unit are matters of complete indifference as far as the utility obtained from the use of the money is concerned. Society is always in enjoyment of the maximum utility obtainable from the use of money. Half of the money at the disposal of the community would yield the same utility as the whole stock, even if the variation in the value of the monetary unit was not proportioned to the variation in the stock of money. But it is important to note that it by no means follows from this that doubling the quantity of money means halving the objective exchange value of money. It would have to be shown that forces emanate from the valuations of individual economic agents which are able to bring about such a proportionate variation. This can never be proved; in fact, its contrary is likely. We have already given a proof of this for the case in which an increase of the quantity of money held by individual economic agents involves at the same time an increase of their income or wealth. But even when the increase in the quantity of money does not affect the wealth or income of the individual economic agents, the effect is still the same.

II.8.78

Let us assume that a man gets half his income in the form of interest-bearing securities and half in the form of money; and that he is in the habit of saving three-quarters of his income, and does this by retaining the securities and using that half of his income which he receives in cash in equal parts for paying for current con sumption and for the purchase of further securities. Now let us assume that a variation in the composition of his income occurs, so that he receives three-quarters of it in cash and only one-quarter in securities. From now on this man will use two-thirds of his cash receipts for the purchase of interest-bearing securities. If the price of the securities rises or, which is the same thing, if their rate of interest falls, then in either case he will be less willing to buy and will reduce the sum of money that he would otherwise have employed for their purchase; he is likely to find that the advantage of a slightly increased reserve exceeds that which could be obtained from the acquisition of the securities. In the second case he will doubtless be inclined to pay a higher price, or more correctly, to purchase a greater quantity at the higher price, than in the first case. But he will certainly not be prepared to pay double as much for a unit of securities in the second case as in the first case.

II.8.79

As far as the earlier exponents of the quantity theory are concerned, the assumption that variations in the quantity of money would have an inversely proportionate effect on its purchasing power may nevertheless be excusable. It is easy to go astray on this point if the attempt is made to explain the value phenomena of the market by reference to exchange value. But it is inexplicable that those theorists also who suppose they are taking their stand on the subjective theory of value could fall into similar errors. The blame here can only be laid to the account of a mechanical conception of market processes. Thus even Fisher and Brown, whose concept of the quantity theory is a mechanical one, and who attempt to express in mathematical equations the law according to which the value of money is determined, necessarily arrive at the conclusion that variations in the ratio between the quantity of money and the demand for it lead to proportionate variations in the objective exchange value of money.*61 How and through what channels this comes about is not disclosed by the formula, for it contains no reference at all to the only factors that are decisive in causing variations of the exchange ratios, that is, variations in the subjective valuations of individuals.

II.8.80

Fisher and Brown give three examples to prove the correctness of their conclusions. In the first, they start with the supposition that the government changes the denomination of the money, so that, for example, what was previously called a half-dollar is now called a whole dollar. It is obvious, they say, that this will cause an increase in the number of dollars in circulation and that prices reckoned in the new dollars will have to be twice as high as they were previously. Fisher and Brown may be right so far, but not in the conclusions that they proceed to draw. What their example actually deals with is not an increase in the quantity of money but merely an alteration in its name. What does the "money" referred to in this example really consist of? Is it the stuff of which dollars are made, the claim that lies behind a credit dollar, the token that is used as money, or is it the word dollar?

II.8.81

The second example given by Fisher and Brown is no less incorrectly interpreted. They start from the assumption that the government divides each dollar into two and mints a new dollar from each half. Here again all that occurs is a change of name.

II.8.82

In their third example they do at least deal with a real increase in the quantity of money. But this example is just as artificial and misleading as those of Hume and Mill which we have already dealt with in some detail. They suppose that the government gives everybody an extra dollar for each dollar that he already possesses. We have already shown that even in this case a proportionate change in the objective exchange value of money cannot follow.

II.8.83

One thing only can explain how Fisher is able to maintain his mechanical quantity theory. To him the quantity theory seems a doctrine peculiar to the value of money; in fact, he contrasts it outright with the laws of value of other economic goods. He says that if the world's stock of sugar increases from a million pounds to a million hundredweight, it would not follow that a hundredweight would have the value that is now possessed by a pound. Money only is peculiar in this respect, according to Fisher. But he does not give a proof of this assertion. With as much justification as that of Fisher and Brown for their mechanical formula for the value of money, a similar formula could be set out for the value of any commodity, and similar conclusions drawn from it. That nobody attempts to do this is to be explained simply and solely by the circumstance that such a formula would so clearly contradict our experience of the demand curves for most commodities, that it could not be maintained even for a moment.

II.8.84

If we compare two static economic systems, which differ in no way from one another except that in one there is twice as much money as in the other, it appears that the purchasing power of the monetary unit in the one system must be equal to half that of the monetary unit in the other. Nevertheless, we may not conclude from this that a doubling of the quantity of money must lead to a halving of the purchasing power of the monetary unit; for every variation in the quantity of money introduces a dynamic factor into the static economic system. The new position of static equilibrium that is established when the effects of the

fluctuations thus set in motion are completed cannot be the same as that which existed before the introduction of the additional quantity of money. Consequently, in the new state of equilibrium the conditions of demand for money, given a certain exchange value of the monetary unit, will also be different. If the purchasing power of each unit of the doubled quantity of money were halved, the unit would not have the same significance for each individual under the new conditions as it had in the static system before the increase in the quantity of money. All those who ascribe to variations in the quantity of money an inverse proportionate effect on the value of the monetary unit are applying to dynamic conditions a method of analysis that is only suitable for static conditions.

II.8.85

It is also entirely incorrect to think of the quantity theory as if the characteristics in question affecting the determination of value were peculiar to money. Most of both the earlier and the later adherents of the theory have fallen into this error, and the fierce and often unfair attacks that have been directed against it appear in a better light when we know of this and other errors of a like kind of which its champions have been guilty.

II.8.86

9 Criticism of Some Arguments Against the Quantity Theory

We have already examined one of the objections that have been brought against the quantity theory: the objection that it only holds good ceteris paribus. No more tenable as an objection against the determinateness of our conclusions is reference to the possibility that an additional quantity of money may be hoarded. This argument has played a prominent role in the history of monetary theory; it was one of the sharpest weapons in the armory of the opponents of the quantity theory. Among the arguments of the opponents of the currency theory it immediately follows the proposition relating to the elasticity of cash-economizing methods of payment, to which it also bears a close relation as far as its content is concerned. We shall deal with it here separately; nevertheless all that we can say about it in the present place needs to be set in its proper light by the arguments contained in the third part of this book, which is devoted to the doctrine of fiduciary media.

II.8.87

For Fullarton, hoards are the regular deus ex machina. They absorb the superfluous quantity of money and prevent it from flowing into circulation until it is needed.*62 Thus they constitute a sort of reservoir which accommodates the ebb and flow of money in the market to the variations in the demand for money. The sums of money collected in hoards lie there idle, waiting for the moment when commerce needs them for maintaining the stability of the objective exchange value of money; and all those sums of money, that might threaten this stability when the demand for money decreases, flow back out of circulation into these hoards to slumber quietly until they are called forth again. This tacitly assumes*63 the fundamental correctness of the arguments of the quantity theory, but asserts that there is nevertheless a principle inherent in the economic system that always prevents the working out of the processes that the quantity theory describes.

II.8.88

But Fullarton and his followers unfortunately neglected to indicate the way in which variations in the demand for money set in motion the mechanism of the hoards. Obviously they supposed this to proceed without the will of the transacting parties entering into the matter at all. Such a view surpasses the naivest versions of the quantity theory in its purely mechanical conception of market transactions. Even the most superficial investigation into the problem of the demand for money could not have failed to demonstrate the untenability of the doctrine of hoards.

II.8.89

In the first place, it must be recognized that from the economic point of view there is no such thing as money lying idle. All money, whether in reserves or literally in circulation (that is, in process of changing hands at the very moment under consideration), is devoted in exactly the same way to the performance of a monetary function.*64 In fact, since money that is surrendered in an exchange is immediately transferred from the ownership of the one party to that of the other, and no period of time can be discovered in which it is actually in movement, all money must be regarded as at rest in the cash reserve of some individual or other The stock of money of the community is the sum of the stocks of individuals; there is

no such thing as errant money, no money which even for a moment does not form part of somebody's stock. All money, that is to say, lies in some individual's stock, ready for eventual use. It is a matter of indifference how soon the moment occurs when a demand for money next arises and the sum of money in question is paid out. In every household or family the members of which are at least moderately prosperous there is a minimum reserve whose level is constantly maintained by replenishment. (The fact has already been mentioned, that besides objective conditions, subjective factors influencing the individual economic agent help to determine the amount of the individual demand for money.) What is called storing money is a way of using wealth. The uncertainty of the future makes it seem advisable to hold a larger or smaller part of one's possessions in a form that will facilitate a change from one way of using wealth to another, or transition from the ownership of one good to that of another, in order to preserve the opportunity of being able without difficulty to satisfy urgent demands that may possibly arise in the future for goods that will have to be obtained by way of exchange. So long as the market has not reached a stage of development in which all, or at least certain, economic goods can be sold (that is, turned into money) at any time under conditions that are not too unfavorable, this aim can be achieved only by holding a stock of money of a suitable size. The more active the life of the market becomes, the more can this stock be diminished. At the present day, the possession of certain sorts of securities which have a large market so that they can be realized without delay and without very considerable loss, at least in normal times, may make the holding of large cash reserves to a certain extent unnecessary.

II.8.90

The demand for money for storage purposes is not separable from the demand for money for other purposes. Hoarding money is nothing but the custom of holding a greater stock of it than is usual with other economic agents, at other times, or in other places. The hoarded sums of money do not lie idle, whether they are regarded from the social or from the individual point of view. They serve to satisfy a demand for money just as much as any other money does. Now the adherents of the banking principle seem to hold the opinion that the demand for storing purposes is elastic and conforms to variations in the demand for money for other purposes in such a way that the total demand for money, that is, that for storing purposes and that for other purposes taken together, adjusts itself to the existing stock of money without any variation in the objective exchange value of the monetary unit. This view is entirely mistaken. In fact, the conditions of demand for money, including the demand for storage purposes, is independent of the circumstances of the supply of money. The contrary supposition can be supported only by supporting a connection between the quantity of money and the rate of interest,*65 that is, by asserting that the variations arising from changes in the ratio between the demand for money and the supply of it, influence to a different degree the prices of goods of the first order and those of goods of higher orders, so that the proportion between the prices of these two classes of goods is altered. The question of the tenability of this proposition, which is based on the view that the rate of interest is dependent on the greater or lesser quantity of money, will have to be brought up again in part three. There the opportunity will also arise for showing that the cash reserves of the banks that issue fudiciary media no more act as a buffer in this way than these mythical hoards do. There is no such thing as a "reserve store" of money out of which commerce can at any time supply its extra requirements or into which it can direct its surpluses.

II.8.91

The doctrine of the importance of hoards for stabilizing the objective exchange value of money has gradually lost its adherents with the passing of time. Nowadays its supporters are few. Even Diehl's membership of this group is only apparent. He agrees, it is true, with the criticism directed by Fullarton against the currency theory. On the other hand, he concedes that Fullarton's expressions inert and dormant are erroneously applied to reserves of money; since these reserves are not idle but merely serve a different purpose from that served by circulating money; he also agrees that sums of money in such reserves and sums used for purposes of payment are not sharply distinguishable, and that the same sums serve now one purpose and now the other. In spite of this, however, he supports Fullarton as against Ricardo. He says that, even if the sums taken out of the reserves must again be replaced out of the stocks of money present in the community; this need not occur immediately; a long period may elapse before it is necessary; and that in any case it follows that the mechanical connection which Ricardo assumes to exist between the quantity of money in circulation and the prices of commodities cannot be accepted, even with regard to hoards.*66 Diehl does not show in greater detail why a long period may elapse before the sums supposed to be taken from the reserves are replaced. But he does admit the fundamental correctness of the

criticism leveled at Fullarton's arguments; it is possible to grant the sole reservation that he makes if we interpret it as meaning that time may and must elapse before changes in the quantity of money express themselves all over the market in a variation of the objective exchange value of money. For that the increase in individuals' stocks of money which results from the inflow of the additional quantity of money must bring about a change in the subjective valuations of the individuals, and that this occurs immediately and begins immediately to have an effect in the market, can hardly be denied. On the other hand, an increase in an individual's demand for money while his stock remains the same, or a decrease of his stock while his demand remains the same, must lead at once to changes in subjective valuations which must be expressed in the market, even if not all at once, in an increase of the objective exchange value of money. It may be admitted that every variation in the quantity of money will impel the individual to check his judgment as to the extent of his requirements for money and that this may result in a reduction of his demand in the case of a diminishing stock of money and an augmentation of it in the case of an increasing stock, but the assumption that such a limitation or extension must occur has no logical foundation, not to speak of the assumption that it must occur in such a degree as to keep the objective exchange value of money stable.

II.8.92

A weightier objection is the denial of the practical importance of the quantity theory, that is implied in the attribution to the present organization of the money, payment, and credit system of a tendency to cancel out variations in the quantity of money and prevent them from becoming effective. It is said that the fluctuating velocity of circulation of money, and the elasticity of methods of payment made possible by the credit system and the progressive improvement of banking organization and technique, that is, the facility with which methods of payment can be adjusted to expanded or contracted business, have made the movement of prices as far as is possible independent of variations in the quantity of money, especially since there exists no quantitative relation between money and its substitutes, that is, between the stock of money and the volume of transactions and payments. It is said that if in such circumstances we still wish to preserve the quantity theory we must not base it merely upon current money but "extend it to embrace all money whatever, including not only all the tangible money substitutes that are capable of circulation, but also every transaction of the banking system or agreement between two parties to a contract that replaces a payment of money." It is admitted that this would make the theory quite useless in practice, but it would secure its theoretical universality. And it is not denied that this raises an almost insoluble problem—that of the conditions under which credit comes into being and of the manner in which it affects the determination of values and prices.*67

II.8.93

The answer to this is contained in the third part of the present work, where the problem of the alleged elasticity of credit is discussed.*68

II.8.94

10 Further Applications of the Quantity Theory

In general the quantity theory has not been used for investigating the consequences that would follow a decrease in the demand for money while the stock of money remained the same. There has been no historical motive for such an investigation. The problem has never been a live one; for there has never been even a shadow of justification for attempting to solve controversial questions of economic policy by answering it. Economic history shows us a continual increase in the demand for money. The characteristic feature of the development of the demand for money is its intensification; the growth of division of labor and consequently of exchange transactions, which have constantly become more and more indirect and dependent on the use of money, have helped to bring this about, as well as the increase of population and prosperity. The tendencies which result in an increase in the demand for money became so strong in the years preceding the war that even if the increase in the stock of money had been very much greater than it actually was, the objective exchange value of money would have been sure to increase. Only the circumstance that this increase in the demand for money was accompanied by an extraordinarily large expansion of credit, which certainly exceeded the increase in the demand for money in the broader sense, can serve to explain the fact that the objective exchange value of money during this period not only failed to increase, but actually decreased. (Another factor that was concerned in this is referred to later in this chapter.)

II.8.95

If we were to apply the mechanical version of the quantity theory to the case of a decrease in the demand for money while the stock of money remained unaltered, we should have to conclude that there would be a uniform increase in all commodity prices, arithmetically proportional to the change in the ratio between the stock of money and the demand for it. We should expect the same results as would follow upon an increase of the stock of money while the demand for it remained the same. But the mechanical version of the theory, based as it is upon an erroneous transference of static law to the dynamic sphere, is just as inadequate in this case as in the other It cannot satisfy us because it does not explain what we want to have explained. We must build up a theory that will show us how a decrease in the demand for money while the stock of it remains the same affects prices by affecting the subjective valuations of money on the part of individual economic agents. A diminution of the demand for money while the stock remained the same would in the first place lead to the discovery by a number of persons that their cash reserves were too great in relation to their needs. They would therefore enter the market as buyers with their surpluses. From this point, a general rise in prices would come into operation, a diminution of the exchange value of money. More detailed explanation of what would happen then is unnecessary.

II.8.96

Very closely related to this case is another, whose practical significance is incomparably greater. Even if we think of the demand for money as constantly increasing it may happen that the demand for particular kinds of money diminishes, or even ceases altogether so far as it depends upon their characteristics as general media of exchange, and this is all we have to deal with here. If any given kind of money is deprived of its monetary characteristics, then naturally it also loses the special value that depends on its use as a common medium of exchange, and only retains that value which depends upon its other employment. In the course of history this has always occurred when a good has been excluded from the constantly narrowing circle of common media of exchange. Generally speaking, we do not know much about this process, which to a large extent took place in times about which our information is scanty. But recent times have provided an outstanding example: the almost complete demonetization of silver. Silver, which previously was widely used as money, has been almost entirely expelled from this position, and there can be no doubt that at a time not very far off, perhaps even in a few years only, it will have played out its part as money altogether. The result of the demonetization of silver has been a diminution of its objective exchange value. The price of silver in London fell from 60 9/10d. on an average in 1870 to 23 12/16d. on an average in 1909. Its value was bound to fall, because the sphere of its employment had contracted. Similar examples can be provided from the history of credit money also. For instance, the notes of the southern states in the American Civil War may be mentioned, which as the successes of the northern states increased, lost pari passu their monetary value as well as their value as claims.*69

II.8.97

More deeply than with the problem of the consequences of a diminishing demand for money while the stock of it remains the same, which possesses only a small practical importance, the adherents of the quantity theory have occupied themselves with the problem of a diminishing stock of money while the demand for it remains the same and with that of an increasing demand for money while the stock of it remains the same. It was believed that complete answers to both questions could easily be obtained in accordance with the mechanical version of the quantity theory, if the general formula, which appeared to embrace the essence of the problems, was applied to them. Both cases were treated as inversions of the case of an increase in the quantity of money while the demand for it remained the same; and from this the corresponding conclusions were drawn. Just as the attempt was made to explain the depreciation of credit money simply by reference to the enormous increase in the quantity of money, so the attempt was made to explain the depression of the seventies and eighties by reference to an increase of the demand for money while the quantity of money did not increase sufficiently. This proposition lay at the root of most of the measures of currency policy of the nineteenth century. The aim was to regulate the value of money by increasing or diminishing the quantity of it. The effects of these measures appeared to provide an inductive proof of the correctness of this superficial version of the quantity theory, and incidentally concealed the weaknesses of its logic. This supposition alone can explain why no attempt was ever made to exhibit the mechanism of the increase of the value of money as a result of the decrease in the volume of circulation.

Here again the old theory needs to be supplemented, as has been done in our argument above.

II.8.98
Normally the increase in the demand for money is slow, so that any effect on the exchange ratio between money and commodities is discernible only with difficulty. Nevertheless, cases do occur in which the demand for money in the narrower sense increases suddenly and to an unusually large degree, so that the prices of commodities drop suddenly. Such cases occur when the public loses faith in an issuer of fiduciary media at a time of crisis, and the fiduciary media cease to be capable of circulation. Many examples of this sort are known to history (one of them is provided by the experiences of the United States in the late autumn of 1907), and it is possible that similar cases may occur in the future.

II.8.99

(III) A Special Cause of Variations in the Objective Exchange Value of Money Arising from the Peculiarities of Indirect Exchange

11 "Dearness of Living"

Those determinants of the objective exchange value of money that have already been considered exhibit no sort of special peculiarity. So far as they are concerned, the exchange value of money is determined no differently from the exchange value of other economic goods. But there are other determinants of variations in the objective exchange value of money which obey a special law.

II.8.100
No complaint is more widespread than that against "dearness of living." There has been no generation that has not grumbled about the "expensive times" that it lives in. But the fact that "everything" is becoming dearer simply means that the objective exchange value of money is falling. It is extraordinarily difficult, if not impossible, to subject such assertions as this to historical and statistical tests. The limits of our knowledge in this direction will have to be referred to in the chapter dealing with the problem of the measurability of variations in the value of money. Here we must be content to anticipate the conclusions of this chapter and state that we can expect no support from investigations into the history of prices or from the methods employed in such investigations. The statements of the average man, even though it may very easily happen that these are founded on self-deception and even though they are so much at the mercy of variations in the subjective valuations of the individual, would almost form a better substantiation of the fact of a progressive fall in the objective exchange value of money than can be provided by all the contents of voluminous statistical publications. Certainty can be afforded only by demonstration that chains of causes exist, which are capable of evoking this sort of movement in the objective exchange value of money and would evoke it unless they were cancelled by some counteracting force. This path, which alone can lead to the desired goal, has already been trodden by many investigators-with what success, we shall see.

II.8.101

12 Wagner's Theory: The Influence of the Permanent Predominance of the Supply Side over the Demand Side on the Determination of Prices

With many others, and in agreement with general popular opinion, Wagner assumes the predominance of a tendency toward the diminution of the objective exchange value of money. He holds that this phenomenon can be explained by the fact that the supply side is almost invariably the stronger and the most capable of pursuing its own acquisitive interest. Even apart from actual cartels, rings, and combinations, and in spite of all the competition of individual sellers among themselves, he claims that the supply side has more solidarity than the opposing demand side. He argues further that the tradesmen engaged in retail trade are more interested in an increase of prices than their customers are in the continuance of the old prices or in price reductions; for the amount of the tradesmen's earnings, and consequently their whole economic and social position, depends largely on the prices they obtain, while as a rule only special, and therefore relatively unimportant, interests of the

customers are involved. Hence the growth on the supply side of a tendency toward the maintenance and raising of prices, which acts as a kind of permanent pressure in the direction of higher prices, more energetically and more universally than the opposing tendency on the demand side. Prices certainly are kept down and re duced in retail trade with the object of maintaining and expanding sales and increasing total profits, and competition may, and often does, make this necessary. But neither influence, according to Wagner, is in the long run so generally and markedly effective as the interest in and striving for higher prices, which is in fact able to compete with and overcome their resistance. In this permanent predominance of the supply side over the demand side, Wagner sees one of the causes of the general increases in prices.*70

II.8.102
Wagner, that is to say, attributes the progressive fall in the objective exchange value of money to a series of factors which have no effect on the determination of wholesale prices but only in the determination of retail prices. Now it is a well-known phenomenon that the retail prices of consumption goods are affected by numerous influences which prevent them from responding rapidly and completely to movements of wholesale prices. And, among the peculiar determinants of retail prices, those predominate which tend to keep them above the level corresponding to wholesale prices. It is, for instance, well known that retail prices adapt themselves more slowly to decreases in wholesale prices than to increases. But it must not be overlooked that the adjustment must eventually take place, all the same, and that the retail prices of consumption goods always participate in the movements of the prices of production goods, even if they lag behind them; and that it is only small, transient movements in wholesale trade that have no effect on retail trade.

II.8.103
Even if we were willing to admit the existence of a permanent predominance of the supply side over the demand side, it would still be decidedly questionable whether we could deduce a tendency toward a general increase of dearness from it. If no further cause could be shown to account for an increase of wholesale prices—and Wagner does not attempt this at all—then we can argue a progressive increase of retail prices only if we are prepared to assume that the time lag between the movements of retail and of wholesale prices is continually increasing. But Wagner makes no such assumption; and it would be very difficult to support it, if he did. It may be said, in fact, that modern commercial development has brought about a tendency toward a more rapid adjustment of retail prices to wholesale and manufacturers' prices. Multiple and chain stores and cooperative societies follow the movements of wholesale prices much more closely than peddlers and small shopkeepers.

II.8.104
It is entirely incomprehensible why Wagner should connect this tendency to a general rise of prices, arising from the predominance of the supply side over the demand side, with the individualistic system of free competition or freedom of trade, and declare that it is under such a system that the tendency is clearest and operates with the greatest force and facility. No proof is given of this assertion, which is probably a consequence of Wagner's antipathy to economic liberalism; neither could one easily be devised. The more developed the freedom of trade, the more easily and quickly are movements in wholesale prices reflected in retail prices, especially downward movements. Where legislative and other limitations on freedom of trade place small producers and retailers in a favored position, the adjustment is slower and sometimes complete adjustment may even be prevented altogether.

II.8.105
A striking example of this is afforded by the Austrian attempts during the last generation to favor craftsmen and small shopkeepers in their competition against factories and large stores, together with the subsequent considerable rise in prices between 1890 and 1914. It is not under free competition that the conditions which Wagner calls the permanent predominance of the supply side over the demand side are most strongly in evidence, but in those circumstances where the development of free competition is opposed by the greatest obstacles.

II.8.106

13 Wieser's Theory: The Influence on the Value of Money Exerted by a Change in the Relations Between Natural Economy and Money Economy

Wieser's attempt*71 to explain an increase in the money prices of goods unaccompanied by any considerable change in their value in terms of other goods, is not entirely satisfactory either. He holds the opinion that most of the changes in the value of money that have actually occurred are to be attributed to changes in the relations between the "natural economy" (Naturalwirtschaft) and the "money economy" (Geldwirtschaft). When the money economy flourishes, the value of money is reduced; when it decays, the value of money rises again. In the early stages of a money economy most wants are still satisfied by the methods of the natural economy. The family is self-supporting; it lives in its own house, and itself produces the greater part of what it needs; the sale of its products constitutes only a supplementary source of income. Consequently, the cost of living of the producer, or, what comes to the same thing, the value of his labor, is not fully allowed for or not allowed for at all in the cost of the products that are sold; all that is included is the cost of the raw materials used and the wear and tear of those tools or other instruments that have had to be specially constructed, which in any case do not amount to much under conditions of extensive production. So it is with the buyer also; the wants that he satisfies by purchase are not among his more important wants and the use-values that he has to estimate are not very great.

II.8.107
Then gradually all this changes. The extension of the sphere of the money economy introduces into cost calculations factors that were not included before but were dealt with on "natural economic" principles. The list of the costs that are reckoned in monetary terms grows longer, and each new element in the cost calculation is estimated by comparison with the factors already expressed in money, and added to them, with the effect of raising prices. Thus a general rise of prices occurs, but this is not interpreted as a consequence of changes in supply conditions, but as a fall in the value of money.

II.8.108
According to Wieser, if it is not possible to explain the increasing rise in the prices of commodities as originating in monetary factors alone (that is, in variations in the relations between the supply of money and the demand for it), then we must seek another reason for these changes in the general level of prices. Now it is impossible to find the reason by reference to such fluctuations in the values of commodities as are caused by factors belonging to the commodity side of the price ratio; for nowadays we are not worse supplied with goods than our forefathers were. But, to Wieser, no other explana tion seems more natural than that which attributes the diminution of the purchasing power of money to the extension of the money economy which was its historical accompaniment. For Wieser, in fact, it is this very inertia of prices which has helped to bring about the change in the value of money during each period of fresh progress; it must have been this that caused the older prices to be raised by the amount of the additional values involved whenever new factors were co-opted into that part of the process of production that was regulated by the money economy. But the higher the money prices of commodities rise, the lower must the value of money fall in comparison. Increasing dearness thus appears as an inevitable symptom of the development of a growing money economy.

II.8.109
It cannot be denied that this argument of Wieser's reveals important points in connection with the market and the determination of prices, which, if followed up, have important bearings on the determination of the exchange ratios between the various economic goods other than money. Nevertheless, so far as Wieser's conclusions relate to the determination of money prices, they exhibit serious shortcomings. In any case, before his argument could be accepted as correct, it would have to be proved that, not forces emanating from the money side, but only forces emanating from the commodity side, are here involved. Not the valuation of money, but only that of the commodities, could have experienced the transformation supposed to be manifested in the alteration of the exchange ratio.

II.8.110
But the chain of reasoning as a whole must be rejected. The development of facilities for exchanging means that the new recruits to the economy increase their subjective valuations of those goods which they wish to dispose of. Goods which they previously valued solely as objects of personal use are now valued additionally on account of their exchangeability for

other goods. This necessarily involves a rise in their subjective value in the eyes of those who possess them and are offering them for exchange. Goods which are to be disposed of in exchange are now no longer valued in terms of the use-value that they would have had for their owners if consumed by them, but in terms of the use-value of the goods that may be obtained in exchange for them. The latter value is always higher than the former, for exchanges only occur when they are profitable to both of the parties concerned.

II.8.111
But on the other hand—and Wieser does not seem to have thought of this—the subjective value of the goods acquired in exchange sinks. The individuals acquiring them no longer ascribe to them the significance corresponding to their position in a subjective scale of values (Wertskala) or utilities (Nutzenskala), they ascribe to them only the smaller significance that belongs to the other goods that have to be surrendered in order to get them.

II.8.112
Let us suppose that the scale of values of the possessor of an apple, a pear, and a glass of lemonade, is as follows:

1. An apple
2. A piece of cake
3. A glass of lemonade
4. A pear

If now this man is given the opportunity of exchanging his pear for a piece of cake, this opportunity will increase the significance that he attaches to the pear. He will now value the pear more highly than the lemonade. If he is given the choice between relinquishing either the pear or the lemonade, he will regard the loss of the lemonade as the lesser evil. But this is balanced by his reduced valuation of the cake. Let us assume that our man possesses a piece of cake, as well as the pear, the apple, and the lemonade. Now if he is asked whether he could better put up with the loss of the cake or of the lemonade, he will in any case prefer to lose the cake, because he can make good this loss by surrendering the pear, which ranks below the lemonade in his scale of values. The possibility of exchange introduces considerations of the objective exchange value of goods into the economic decisions of every individual; the original primary scale of use-values is replaced by the derived secondary scale of exchange values and use-values, in which economic goods are ranked not only with regard to their use-values, but also according to the value of the goods that can be obtained for them in exchange. There has been a transposition of the goods; the order of their significance has been altered. But if one good is placed higher, then—there can be no question of it—some other must be placed lower. This arises simply from the very nature of the scale of values, which constitutes nothing but an arrangement of the subjective valuations in order of the significance of the objects valued.

II.8.113
The extension of the sphere of exchange has the same effects on objective exchange values as on subjective values. Here also every increase of value on the one side must be opposed by a decrease of value on the other side. In fact the alteration of an exchange ratio between two goods in such a way that both become dearer is inconceivable. And this cannot be avoided by the interposition of money. When it is asserted that the objective exchange value of money has experienced an alteration, some special cause for this must be demonstrated, apart from the bare fact of the extension of the sphere of exchange. But nobody has ever provided this demonstration.

II.8.114
Wieser commences by contrasting, after the fashion of economic historians, the natural economy and the money economy. These terms fail to provide that scientific abstraction of concepts that is the indispensable basis of all theoretical investigation. It remains uncertain whether the contrast of an exchangeless state with an order of society based upon exchange is intended, or a contrast between conditions of direct exchange and of indirect exchange based upon the use of money. It seems most likely that Wieser intends to contrast an exchangeless state with one of exchange through money. This is certainly the sense in which the expressions natural economy and money economy are used by economic historians; and this definition corresponds to the actual course of economic history after the full development of the institution of money. Nowadays, when new geographical areas or new spheres of consumption are brought within the scope of exchange, there is a direct transition

from the exchangeless state to that of the money economy; but this has not always been so. And in any case the economist must make a clear distinction.

II.8.115

Wieser speaks of the townsman who is in the habit of spending his summer holiday in the country and of always finding cheap prices there. One year, when this townsman goes on holiday he finds that prices have suddenly become higher all round; the village has meanwhile been brought within the scope of the money economy. The farmers now sell their milk and eggs and poultry in the town and demand from their summer visitors the prices that they can hope to get at market. But what Wieser describes here is only half the process. The other half is worked out in the town, where the milk, eggs, and poultry coming on the market from the newly tapped sources of supply in the village exhibit a tendency toward a reduction of price. The inclusion of what has hitherto been a natural economy within the scope of an exchange system involves no one-sided rise of prices, but a leveling of prices. The contrary effect would be evoked by any contraction of the scope of the exchange system; it would have an inherent tendency to increase the differences between prices. Thus we should not use this phenomenon, as Wieser does, to substantiate propositions about variations in the objective exchange value of money.

II.8.116

14 The Mechanism of the Market as a Force Affecting the Objective Exchange Value of Money

Nevertheless, the progressive rise of prices and its complement, the fall in the value of money, may quite well be explained from the monetary side, by reference to the nature of money and monetary transactions.

II.8.117

The modern theory of prices has stated all its propositions with a view to the case of direct exchange. Even where it does include indirect exchange within the scope of its considerations, it does not take sufficient account of the peculiarity of that kind of exchange which is dependent upon the help of the common medium of exchange, or money. This, of course, does not constitute an objection to the modern theory of prices. The laws of price determination which it has established for the case of direct exchange are also valid for the case of indirect exchange, and the nature of an exchange is not altered by the use of money. Nevertheless, the monetary theorist has to contribute an important addition to the general theory of prices.

II.8.118

If a would-be buyer thinks that the price demanded by a would be seller is too high, because it does not correspond to his subjective valuations of the goods in question, a direct exchange will not be feasible unless the would-be seller reduces his demands. But by indirect exchange, with money entering into the case, even without such a reduction there is still a possibility that the transaction may take place. In certain circumstances the would-be buyer may decide to pay the high price demanded, if he can hope similarly to obtain a better price than he had reckoned upon for those goods and services that he himself has to dispose of. In fact, this would very often be the best way for the would-be buyer to obtain the greatest possible advantage from the transaction. Of course, this will not be true, as in the case of transactions like those of the stock exchange, or in individual bargaining, when both parties cooperate immediately in the determination of prices and consequently are able to give direct expression to their subjective estimates of commodity and medium of exchange. But there are cases in which prices appear to be determined one-sidedly by the seller, and the buyer is obliged to abstain from purchase when the price demanded is too high. In such a case, when the abstention of the purchaser indicates to the seller that he has overreached his demand, the seller may reduce his price again (and, of course, in so doing, may possibly go too far, or not far enough). But under certain conditions a different procedure may be substituted for this roundabout process. The buyer may agree to the price demanded and attempt to recoup himself elsewhere by screwing up the prices of the goods that he himself has for sale. Thus a rise in the price of food may cause the laborers to demand higher wages. If the entrepreneurs agree to the laborers' demands, then they in turn will raise the prices of their products, and then the food producers may perhaps regard this rise in the price of manufactured goods as a reason for a new rise in the price of food. Thus increases in

prices are linked together in an endless chain, and nobody can indicate where the beginning is and where the end, or which is cause and which effect.

II.8.119

In modern selling policies "fixed prices" play a large part. It is customary for cartels and trusts and in fact all monopolists, including the state, to fix the prices of their products independently, without consulting the buyers; they appear to prescribe prices to the buyer. The same is often true in retail trade. Now this phenomenon is not accidental. It is an inevitable phenomenon of the unorganized market. In the unorganized market, the seller does not come into contact with all of the buyers, but only with single individuals or groups. Bargaining with these few persons would be useless, for it is not their valuations alone but those of all the would-be purchasers of the good in question that are decisive for price determination. Consequently the seller fixes a price that in his opinion corresponds approximately to what the price ought to be (in which it is understandable that he is more likely to aim too high than too low), and waits to see what the buyers will do. In all of those cases in which he alone appears to fix prices, he lacks exact knowledge of the buyers' valuations. He can make more or less correct assumptions about them, and there are merchants who by close observation of the market and of the psychology of buyers have become quite remarkably expert at this; but there can be no certainty. In fact, estimates often have to be made of the effects of uncertain and future processes. The sole way by which sellers can arrive at reliable knowledge about the valuations of consumers is the way of trial and error Therefore they raise prices until the abstention of the buyers shows them that they have gone too far. But even though the price may seem too high, given the current value of money the buyer may still pay it if he can hope in the same way to raise the price which he "fixes" and believes that this will lead more quickly to his goal than abstention from purchasing, which might not have its full effect for a long time and might also involve a variety of inconveniences to him. In such circumstances the seller is deprived of his sole reliable check upon the reasonableness of the prices he demands. He sees that these prices are paid, thinks that the profits of his business are increasing proportionately, and only gradually discovers that the fall in the purchasing power of money deprives him of part of the advantage he has gained. Those who have carefully traced the history of prices must agree that this phenomenon repeats itself a countless number of times. It cannot be denied that much of this passing on of price increases has indeed reduced the value of money, but has by no means altered the exchange ratios between other economic goods in the intended degree.

II.8.120

In order to guard against any possible misunderstanding, it should be explicitly stated that there is no justification for drawing the conclusion from this that all increases of prices can be passed on in this way, and so perhaps for assuming that there is a fixed exchange ratio between the different economic goods and human efforts. To be consistent, we should then have to ascribe the rise in the money prices of goods to the vain efforts of human greed. A rise in the money price of a commodity does as a rule modify its exchange ratio to the other commodities, although not always in the same degree as that in which its exchange ratio to money has been altered.

II.8.121

The champions of the mechanical version of the quantity theory may perhaps admit the fundamental correctness of this line of argument, but still object that every variation in the objective exchange value of money that does not start from changes in the relations between the supply of money and the demand for it must be automatically self-correcting. If the objective exchange value of money falls, then the demand for money must necessarily increase, since in order to cope with the volume of transactions a larger sum of money is necessary. If it were permissible to regard a community's demand for money as the quotient obtained by dividing the volume of transactions by the velocity of circulation, this objection would be justified. But the error in it has already been exposed. The dependence of the demand for money on objective conditions, such as the number and size of the payments that have to be coped with, is only an indirect dependence through the medium of the subjective valuations of individuals. If the money prices of commodities have risen and each separate purchase now demands more money than before, this need not necessarily cause individuals to increase their stocks of money. It is quite possible, despite the rise of prices, that individuals will form no intention of increasing their reserves, that they will not increase their demand for money. They will probably endeavor to increase their money incomes; in fact this is one way in which the general rise of prices expresses itself. But increase of money

incomes is by no means identical with increase of money reserves. It is of course possible that individuals' demands for money may rise with prices; but there is not the least ground for assuming that this will occur, and in particular for assuming that such an increase will occur in such a degree that the effect of the decrease in the purchasing power of money is completely canceled. Quite as justifiably, the contrary assumption might also be hazarded, name1y that the avoidance of unnecessary expenditure forced upon the individual by the rise of prices would lead to a revision of views concerning the necessary level of cash reserves and that the resultant decision would certainly be not for an increase, but rather for even a decrease, in the amount of money to be held.

II.8.122
But here again it must be observed that this is a matter of a variation brought about through dynamic agencies. The static state, for which the contention attributed to the adherents of the mechanical version of the quantity theory would be valid, is disturbed by the fact that the exchange ratios between individual commodities are necessarily modified. Under certain conditions, the technique of the market may have the effect of extending this modification to the exchange ratio between money and other economic goods also.*72

II.8.123

(IV) Excursuses

15 The Influence of the Size of the Monetary Unit and Its Subdivisions on the Objective Exchange Value of Money

The assertion is often encountered that the size of the monetary unit exerts a certain influence on the determination of the exchange ratio between money and the other economic goods. In this connection the opinion is expressed that a large monetary unit tends to raise the money prices of commodities while a small monetary unit is likely to increase the purchasing power of money. Considerations of this sort played a notable part in Austria at the time of the currency regulation of the year 1892 and were decisive in causing the new krone, or half-gulden, to be substituted for the previous, larger, unit, the gulden. So far as this assertion touches the determination of wholesale prices, it can hardly be seriously maintained. But in retail trade the size of the monetary unit admittedly has a certain significance, which, however, must not be overestimated.*73

II.8.124
Money is not indefinitely divisible. Even with the assistance of money substitutes for expressing fractional sums that for technical reasons cannot conveniently be expressed in the actual monetary material (a method that has been brought to perfection in the modern system of token coinage), it seems entirely impossible to provide commerce with every desired fraction of the monetary unit in a form adapted to the requirements of a rapid and safe transaction of business. In retail trade, rounding off must necessarily be resorted to. The retail prices of the less valuable commodities—and among these are the prices of the most important articles of daily use and those of certain services such as the carriage of letters and passenger transport on railways and tramways—must be adjusted in some way to the available coinage. The coinage can only be disregarded in the case of commodities whose nature allows them to be subdivided to any desired extent. In the case of commodities that are not so divisible, the prices of the smallest quantity of them that is offered for independent sale must coincide with the value of one or more of the available coins. But in the case of both groups of commodities, continual subdivision of quantities for retail sale is hindered by the fact that small values cannot be expressed in the available coinage. If the smallest available fractional coin is too large to express exactly the price of some commodity, then the matter may be adjusted by exchanging several units of the commodity on the one hand against one or more coins on the other. In the retail market for fruit, vegetables, eggs, and other similar commodities, prices such as two for three heller, five for eight heller, and so on, are everyday phenomena. But in spite of this there remain a large number of fine shades of value that are inexpressible. Ten pfennigs of the currency of the German Reich (equivalent to 1/27900 kg. of gold) could not be expressed in coins of the Austrian krone currency; eleven heller (equivalent to 11/328000 kg. of gold) were too little, twelve heller (equivalent to 3/82000 kg. of gold) were too much. Consequently there had to be small differences between prices which otherwise would have been kept equal in both countries.*74

II.8.125
This tendency is intensified by the circumstance that the prices of particularly common goods and services are usually expressed, not merely in such fractions of the monetary unit as can be expressed in coins, but in amounts corresponding as nearly as possible to the denominations of the coinage. Everybody is familiar with the tendency toward "rounding off" which retail prices exhibit, and this is based almost entirely on the denominations of money and money substitutes. Still greater is the significance of the denominations of the coinage in connection with certain prices for which custom prescribes payment "in round figures." The chief examples of this are tips, fees, and the like.

II.8.126

16 A Methodological Comment

In a review devoted to the first edition of this book,*75 Professor Walter Lotz deals with the criticism that I have brought forward against Laughlin's explanation of the value of the Austrian silver gulden in the years 1879-92.*76 His arguments are particularly interesting, inasmuch as they offer an excellent opportunity of exemplifying the difference that exists between the conception and solution of problems in modern economic theory based on the subjective theory of value on the one hand, and under the empirico-realistic treatment of the historically and sociopolitically oriented schools of Schmoller and Brentano on the other.

II.8.127
According to Professor Lotz it is "a question of taste" whether my arguments are "recognized as having any value." He does not "find them impressive." He says that he himself was not at first able to agree with Laughlin's view, until "Laughlin mentioned information, which makes his arguments at least very probable." Laughlin, in fact, told him that "in the eighties he received the information from the leading house of Viennese high finance, that people were reckoning with the fact that the paper gulden would be eventually converted at some rate or other." Professor Lotz adds to this: "Certainly it was also of importance that the circulation of paper gulden and silver gulden was quantitatively very moderate, and that these means of payment were accepted by the public banks at their nominal value. All the same, the expectations for the future that the leading house of Viennese high finance had reason to nurse cannot have been quite without effect on the international valuation of the Austrian paper gulden. Consequently it may be justifiable in view of this information to ascribe some weight to Laughlin's argument, in spite of von Mises."

II.8.128
The mysterious communication made to Laughlin by "the leading house of Viennese high finance," and handed on by him to Professor Lotz, was a secret de Polichinelle. The innumerable articles devoted to the question of the standard that appeared during the eighties in the Austrian and Hungarian papers, especially in the Neue Freie Presse, always assumed that Austria-Hungary would go over to the gold standard. Preparation for this step had been made as early as 1879 by the suspension of the free coinage of silver All the same, proof of this fact, which is denied by nobody (or at least not by me), in no way solves the problem we are concerned with, as Professor Lotz apparently supposes it to do. It merely indicates the problem that we have to solve. The fact that the gulden was "eventually" to be converted into gold "at some rate or other" does not explain why it was at that time valued at a certain amount and not higher or lower. If the gulden were to be converted into gold, and the national debt certificates into gulden, how did it come about that the interest-bearing national debt bonds were valued less highly than the gulden notes and coined gulden which did not bear interest? That is what we have to explain. It is obvious that our problem is only just beginning at the point where it is finished with for Professor Lotz.

II.8.129
It is true that Professor Lotz is prepared to admit that it was "also of importance" that the circulation of paper gulden and silver gulden was "quantitatively very moderate"; and he grants the validity of yet a third explanation in addition, namely that this means of payment was accepted by the Treasury at its nominal value. But the relationship of these explanations to each other remains obscure. Possibly it has not occurred to Professor Lotz that the first and second are difficult to reconcile. For if the gulden was valued only in consideration of its eventual conversion into gold, it is fair to assume that it could have made no difference

whether more or fewer gulden were in circulation, so long, say, as the funds available for conversion were not limited to a given amount. The third attempt at an explanation is altogether invalid, since the "nominal value" of the gulden was only the "gulden" over again and the very point at issue is to account for the purchasing power of the gulden.

II.8.130
The sort of procedure that Professor Lotz adopts here for solving a problem of economic science must necessarily end in failure. It is not enough to collect the opinions of businessmen—even if they are "leading" men or belong to "leading" houses—and then serve them up to the public, garnished with a few on the one hand's and on the other hand's, an admittedly or so, and a sprinkling of all the same's. The collection of "facts" is not science, by a long way. There are no grounds for ascribing authoritative significance to the opinions of businessmen; for economics, these opinions are nothing more than material, to be worked upon and evaluated. When the businessman tries to explain anything he becomes as much a "theorist" as anybody else; and there is no reason for giving a preference to the theories of the practical merchant or farmer. It is, for instance, impossible to prove the cost-of-production theory of the older school by invoking the innumerable assertions of businessmen that "explain" variations in prices by variations in costs of production.

II.8.131
Nowadays there are many who, busied with the otiose accumulation of material, have lost their understanding for the specifically economic in the statement and solution of problems. It is high time to remember that economics is something other than the work of the reporter whose business it is to ask X the banker and Y the commercial magnate what they think of the economic situation.

II.8.132

PART THREE
MONEY AND BANKING

CHAPTER 15
The Business of Banking

1 Types of Banking Activity

The business of banking falls into two distinct branches: the negotiation of credit through the loan of other people's money and the granting of credit through the issue of fiduciary media, that is, notes and bank balances that are not covered by money. Both branches of business have always been closely connected. They have grown up on a common historical soil, and nowadays are still often carried on together by the same firm. This connection cannot be ascribed to merely external and accidental factors; it is founded on the peculiar nature of fiduciary media, and on the historical development of the business of banking. Nevertheless, the two kinds of activity must be kept strictly apart in economic theory; for only by considering each of them separately is it possible to understand their nature and functions. The unsatisfactory results of previous investigations into the theory of banking are primarily attributable to inadequate consideration of the fundamental difference between them.

III.15.1
Modern banks, beside their banking activities proper, carry on various other more or less closely related branches of business. There is, for example, the business of exchanging money, on the basis of which the beginnings of the banking system in the Middle Ages were developed, and to which the bill of exchange, one of the most important instruments of banking activity, owes its origin. Banks still carry on this business nowadays, but so do exchange bureaus, which perform no banking functions; and these also devote themselves to such business as the purchase and sale of securities.

III.15.2
The banks have also taken over a number of functions connected with the general management of the property of their customers. They accept and look after securities as "open" deposits, detach interest and dividend coupons as they fall due, and receive the sums concerned. They superintend the allotment of shares, attend to the renewal of coupon sheets, and see to other similar matters. They carry out stock exchange dealings for their customers and also the purchase and sale of securities that are not quoted on the exchange. They let out strong rooms which are used for the secure disposal of articles of value under the customer's seal. All of these activities, whatever their bearing in individual cases upon the profitability of the whole undertaking, and however great their economic significance for the community as a whole, yet have no inherent connection with banking proper as we have defined it above.

III.15.3
The connection between banking proper and the business of speculation and flotation is similarly loose and superficial. This is the branch of their activities on which the general economic importance of the banks nowadays depends, and by means of which on the continent of Europe and in the United States they secured control of production, no less than of the provision of credit. It would not be easy to overestimate the influence on the organization of economic life that has been exerted by the change in the relation of the banks to industry and commerce; perhaps it would not be an exaggeration to describe it as the most important event in modern economic history. But in connection with the influence of banking on the exchange ratio between money and other economic goods, which alone concerns us here, it has no significance at all.

III.15.4

2 The Banks as Negotiators of Credit

The activity of the banks as negotiators of credit is characterized by the lending of other people's, that is, of borrowed, money. Banks borrow money in order to lend it; the difference between the rate of interest that is paid to them and the rate that they pay, less their working expenses, constitutes their profit on this kind of transaction. Banking is negotiation between granters of credit and grantees of credit. Only those who lend the money of others are bankers; those who merely lend their own capital are capitalists, but not bankers.*1 Our use of this definition of the Classical School should not furnish any ground for terminological controversy. The expression banking may be extended or contracted as one likes, although there seems little reason for departing from a terminology that has been usual since Smith and Ricardo. But one thing is essential: that activity of the banks that consists in lending other people's money must be sharply distinguished from all other branches of their business and subjected to separate consideration.

III.15.5
For the activity of the banks as negotiators of credit the golden rule holds, that an organic connection must be created between the credit transactions and the debit transactions. The credit that the bank grants must correspond quantitatively and qualitatively to the credit that it takes up. More exactly expressed, "The date on which the bank's obligations fall due must not precede the date on which its corresponding claims can be realized."*2 Only thus can the danger of insolvency be avoided. It is true that a risk remains. Imprudent granting of credit is bound to prove just as ruinous to a bank as to any other merchant. That follows from the legal structure of their business; there is no legal connection between their credit transactions and their debit transactions, and their obligation to pay back the money they have borrowed is not affected by the fate of their investments; the obligation continues even if the investments prove dead losses. But it is just the existence of this risk which makes it worthwhile for the bank to play the part of an intermediary between the granter of credit and the grantee of it. It is from the acceptance of this risk that the bank derives its profits and incurs its losses.

III.15.6
That is all that needs to be said here about this branch of the business of banking. For as far as money and monetary theory are concerned, even the function of the banks as negotiators of credit is of significance only so far as it is able to influence the issue of fiduciary media, which alone will be discussed in the rest of the present work.

III.15.7

3 The Banks as Issuers of Fiduciary Media

To comprehend the significance of fiduciary media, it is necessary to examine the nature of credit transactions.

III.15.8

Acts of exchange, whether direct or indirect, can be performed either in such a way that both parties fulfill their parts of the contract at the same time, or in such a way that they fulfill them at different times. In the first case we speak of cash transactions; in the second, of credit transactions. A credit transaction is an exchange of present goods for future goods.

III.15.9

Credit transactions fall into two groups, the separation of which must form the starting point for every theory of credit and especially for every investigation into the connection between money and credit and into the influence of credit on the money prices of goods. On the one hand are those credit transactions which are characterized by the fact that they impose a sacrifice on that party who performs his part of the bargain before the other does—the forgoing of immediate power of disposal over the exchanged good, or, if this version is preferred, the forgoing of power of disposal over the surrendered good until the receipt of that for which it is exchanged. This sacrifice is balanced by a corresponding gain on the part of the other party to the contract—the advantage of obtaining earlier disposal over the good acquired in exchange, or, what is the same thing, of not having to fulfill his part of the bargain immediately. In their respective valuations both parties take account of the advantages and disadvantages that arise from the difference between the times at which they have to fulfill the bargain. The exchange ratio embodied in the contract contains an expression of the value of time in the opinions of the individuals concerned.

III.15.10

The second group of credit transactions is characterized by the fact that in them the gain of the party who receives before he pays is balanced by no sacrifice on the part of the other party. Thus the difference in time between fulfillment and counterfulfillment, which is just as much the essence of this kind of transaction as of the other, has an influence merely on the valuations of the one party, while the other is able to treat it as insignificant. This fact at first seems puzzling, even inexplicable; it constitutes a rock on which many economic theories have come to grief. Nevertheless, the explanation is not very difficult if we take into account the peculiarity of the goods involved in the transaction. In the first kind of credit transactions, what is surrendered consists of money or goods, disposal over which is a source of satisfaction and renunciation of which a source of dissatisfaction. In the credit transactions of the second group, the granter of the credit renounces for the time being the ownership of a sum of money, but this renunciation (given certain assumptions that in this case are justifiable) results for him in no reduction of satisfaction. If a creditor is able to confer a loan by issuing claims which are payable on demand, then the granting of the credit is bound up with no economic sacrifice for him. He could confer credit in this form free of charge, if we disregard the technical costs that may be involved in the issue of notes and the like. Whether he is paid immediately in money or only receives claims at first, which do not fall due until later, remains a matter of indifference to him.*3

III.15.11

It seems desirable to choose special names for the two groups of credit transactions in order to avoid any possible confusion of the concepts. For the first group the name commodity credit (Sachkredit) is suggested, for the second the name circulation credit (Zirkulationskredit). It must be admitted that these expressions do not fully indicate the essence of the distinction that they are intended to characterize. This objection, however, which can in some degree be urged against all technical terms, is not of very great importance. A sufficient reply to it is contained in the fact that there are no better and more apt expressions in use to convey the distinction intended, which, generally speaking, has not received the consideration it merits. In any case the expression circulation credit gives occasion for fewer errors than the expression emission credit (Emissionskredit), which is sometimes used and has been chosen merely with regard to the issue of notes. Besides, what applies to all such differences of opinion is also true of this particular terminological controversy—the words used do not matter; what does matter is what the words are intended to mean.

III.15.12
Naturally, the peculiarities of circulation credit have not escaped the attention of economists. It is hardly possible to find a single theorist who has devoted serious consideration to the fundamental problems of the value of money and credit without having referred to the peculiar circumstances in which notes and checks are used. That this recognition of the individuality of certain kinds of credit transactions has not led to the distinction of commodity credit and circulation credit is probably to be ascribed to certain accidents in the history of our science. The criticism of isolated dogmatic and economico-political errors of the Currency principle that constituted the essence of most nineteenth-century investigation into the theory of banking and credit led to an emphasis being placed on all the factors that could be used to demonstrate the essential similarity of notes and other media of bank credit, and to the oversight of the important differences that exist between the two groups of credit characterized above, the discovery of which constitutes one of the permanent contributions of the Classical School and its successors, the Currency theorists.

III.15.13
The peculiar attitude of individuals toward transactions involving circulation credit is explained by the circumstance that the claims in which it is expressed can be used in every connection instead of money. He who requires money, in order to lend it, or to buy something, or to liquidate debts, or to pay taxes, is not first obliged to convert the claims to money (notes or bank balances) into money; he can also use the claims themselves directly as means of payment. For everybody they therefore are really money substitutes; they perform the monetary function in the same way as money; they are "ready money" to him, that is, present, not future, money. The practice of the merchant who includes under cash not merely the notes and token coinage which he possesses but also any bank balances which he has constantly at his immediate disposal by means of checks or otherwise is just as correct as that of the legislator who endows these fiduciary media with the legal power of settling all obligations contracted in terms of money—in doing which he only confirms a usage that has been established by commerce.

III.15.14
In all of this there is nothing special or peculiar to money. The objective exchange value of an indubitably secure and mature claim, which embodies a right to receive a definite individual thing or a definite quantity of fungible things, does not differ in the least from the objective exchange value of the thing or quantity of things to which the claim refers. What is significant for us lies in the fact that such claims to money, if there is no doubt whatever concerning either their security or their liquidity, are, simply on account of their equality in objective exchange value to the sums of money to which they refer, commercially competent to take the place of money entirely. Anyone who wishes to acquire bread can achieve his aim by obtaining in the first place a mature and secure claim to bread. If he only wishes to acquire the bread in order to give it up again in exchange for something else, he can give this claim up instead and is not obliged to liquidate it. But if he wishes to consume the bread, then he has no alternative but to procure it by liquidation of the claim. With the exception of money, all the economic goods that enter into the process of exchange necessarily reach an individual who wishes to consume them; all claims which embody a right to the receipt of such goods will therefore sooner or later have to be realized. A person who takes upon himself the obligation to deliver on demand a particular individual good, or a particular quantity of fungible goods (with the exception of money), must reckon with the fact that he will be held to its fulfillment, and probably in a very short time. Therefore he dare not promise more than he can be constantly ready to perform. A person who has a thousand loaves of bread at his immediate disposal will not dare to issue more than a thousand tickets each of which gives its holder the right to demand at any time the delivery of a loaf of bread. It is otherwise with money. Since nobody wants money except in order to get rid of it again, since it never finds a consumer except on ceasing to be a common medium of exchange, it is quite possible for claims to be employed in its stead, embodying a right to the receipt on demand of a certain sum of money and unimpugnable both as to their convertibility in general and as to whether they really would be converted on the demand of the holder; and it is quite possible for these claims to pass from hand to hand without any attempt being made to enforce the right that they embody. The obligee can expect that these claims will remain in circulation for so long as their holders do not lose confidence in their prompt convertibility or transfer them to persons who have not this confidence. He is therefore in a position to undertake greater obligations than he would ever be able to fulfill; it is enough if

he takes sufficient precautions to ensure his ability to satisfy promptly that proportion of the claims that is actually enforced against him.

III.15.15
The fact that is peculiar to money alone is not that mature and secure claims to money are as highly valued in commerce as the sums of money to which they refer, but rather that such claims are complete substitutes for money, and, as such, are able to fulfill all the functions of money in those markets in which their essential characteristics of maturity and security are recognized. It is this circumstance that makes it possible to issue more of this sort of substitute than the issuer is always in a position to convert. And so the fiduciary medium comes into being in addition to the money certificate.

III.15.16
Fiduciary media increase the supply of money in the broader sense of the word; they are consequently able to influence the objective exchange value of money. To the investigation of this influence the following chapters are devoted.

III.15.17

4 Deposits as the Origin of Circulation Credit

Fiduciary media have grown up on the soil of the deposit system; deposits have been the basis upon which notes have been issued and accounts opened that could be drawn upon by checks. Independently of this, coins, at first the smaller and then the mediumsized, have developed into fiduciary media. It is usual to reckon the acceptance of a deposit which can be drawn upon at any time by means of notes or checks as a type of credit transaction and juristically this view is, of course, justified; but economically, the case is not one of a credit transaction. If credit in the economic sense means the exchange of a present good or a present service against a future good or a future service, then it is hardly possible to include the transactions in question under the conception of credit. A depositor of a sum of money who acquires in exchange for it a claim convertible into money at any time which will perform exactly the same service for him as the sum it refers to, has exchanged no present good for a future good. The claim that he has acquired by his deposit is also a present good for him. The depositing of the money in no way means that he has renounced immediate disposal over the utility that it commands.

III.15.18
Therefore the claim obtained in exchange for the sum of money is equally valuable to him whether he converts it sooner or later, or even not at all; and because of this it is possible for him, without damaging his economic interests, to acquire such claims in return for the surrender of money without demanding compensation for any difference in value arising from the difference in time between payment and repayment, such, of course, as does not in fact exist. That this could be so repeatedly overlooked is to be ascribed to the long accepted and widely accepted view that the essence of credit consists in the confidence which the lender reposes in the borrower The fact that anybody hands money over to a bank in exchange for a claim to repayment on demand certainly shows that he has confidence in the bank's constant readiness to pay. But this is not a credit transaction, because the essential element, the exchange of present goods for future goods, is absent. But another circumstance that has helped to bring about the mistaken opinion referred to is the fact that the business performed by banks in exchanging money for claims to money payable on demand which can be transferred in the place of money, is very closely and intimately connected with that particular branch of their credit business that has most influenced the volume of money and entirely transformed the whole monetary system of the present day, namely, the provision of circulation credit. It is with this sort of banking business alone, the issue of notes and the opening of accounts that are not covered by money, that we are concerned. For this sort of business alone is of significance in connection with the function and value of money; the volume of money is affected by no other credit transactions than these.

III.15.19
While all other credit transactions may occur singly and be per formed on both sides by persons who do not regularly occupy themselves with such transactions, the provision of credit through the issue of fiduciary media is only possible on the part of an undertaking which conducts credit transactions as a matter of regular business. Deposits must be

accepted and loans granted on a fairly considerable scale before the necessary conditions for the issue of fiduciary media are fulfilled. Notes cannot circulate unless the person who issues them is known and trustworthy. Moreover, payment by transfer from one account to another presupposes either a large circle of customers of the same bank or such a union of several banking undertakings that the total number of participants in the system is large. Fiduciary media can therefore be created only by banks and bankers; but this is not the only business that can be carried on by banks and bankers.

III.15.20

One branch of banking business deserves particular mention because, although closely related to that circle of banking activities with which we have to deal, it is quite without influence on the volume of money. This is that deposit business which does not serve the bank as a basis for the issue of fiduciary media. The activity carried on here by the bank is merely that of an intermediary, concerning which the English definition of a banker as a man who lends other people's money is perfectly apt. The sums of money handed over to the bank by its customers in this branch of business are not a part of their reserves, but investments of money which are not necessary for day-to-day transactions. As a rule the two groups of deposits are distinguished even by the form they have in banking technique. The current accounts can be withdrawn on demand, that is to say, without previous notice. Often no interest at all is paid upon them, but when interest is paid, it is lower than that on the investment deposits. On the other hand, the investment deposits always bear interest and are usually repayable only on notice being given in advance. In the course of time, the differences in banking technique between the two kinds of deposit have been largely obliterated. The development of the savings-deposit system has made it possible for the banks to undertake the obligation to pay out small amounts of savings deposits at any time without notice. The larger the sums which are brought to the banks in the investment-deposit business, the greater, according to the law of large numbers, is the probability that the sums paid in on any particular day will balance those whose repayment is demanded, and the smaller is the reserve which will guarantee the bank the possibility of not having to break any of its promises. Such a reserve is all the easier to maintain inasmuch as it is combined with the reserve of the current-account business. Small business people or not very well-to-do private individuals, whose monetary affairs are too insignificant to be transferred as a whole to a bank, now make use of this development by trusting part of their reserve to the banks in the form of savings deposits. On the other hand, the circumstance that competition among banks has gradually raised the rate of interest on current accounts causes sums of money that are not needed for current-account purposes, and therefore might be invested, to be left on current account as a temporary investment. Nevertheless, these practices do not alter the principle of the matter; it is not the formal technical aspect of a transaction but its economic character that determines its significance for us.

III.15.21

From the point of view of the banks there does exist a connection between the two kinds of deposit business inasmuch as the possibility of uniting the two reserves permits of their being maintained at a lower level than their sum would have to be if they were completely independent. This is extremely important from the point of view of banking technique, and explains to some degree the advantage of the deposit banks, which carry on both branches of business, over the savings banks, which only accept savings deposits (the savings banks being consequently driven to take up currentaccount business also). For the organization of the banking system this circumstance is of importance; for the theoretical investigation of its problems it is negligible.

III.15.22

The essential thing about that branch of banking business which alone needs to be taken into consideration in connection with the volume of money is this: the banks that undertake current-account business for their customers are, for the reasons referred to above, in a position to lend out part of the deposited sums of money. It is a matter of indifference how they do this, whether they actually lend out a portion of the deposited money or issue notes to those who want credit or open a current account for them. The only circumstance that is of importance here is that the loans are granted out of a fund that did not exist before the loans were granted. In all other circumstances, whenever loans are granted they are granted out of existing and available funds of wealth. A bank which neither possesses the right of note issue nor carries on current-account business for its customers can never lend out more money than the sum of its own resources and the resources that other persons have entrusted to it. It is otherwise with those banks that issue notes or open current accounts.

They have a fund from which to grant loans, over and above their own resources and those resources of other people that are at their disposal.

III.15.23

5 The Granting of Circulation Credit

According to the prevailing opinion, a bank which grants a loan in its own notes plays the part of a credit negotiator between the borrowers and those in whose hands the notes happen to be at any time. Thus in the last resort bank credit is not granted by the banks but by the holders of the notes. The intervention of the banks is said to have the single object of permitting the substitution of its well-known and indubitable credit for that of an unknown and perhaps less trustworthy debtor and so of making it easier for a borrower to get a loan taken up by "the public." It is asserted, for example, that if bills are discounted by the bank and the discounted equivalent paid out in notes, these notes only circulate in place of the bills, which would otherwise be passed directly from hand to hand in lieu of cash. It is thought that this can also be proved historically by reference to the fact that before the development of the bank-of-issue system, especially in England, bills circulated to a greater extent than afterward; that in Lancashire, for example, until the opening of a branch of the Bank of England in Manchester, ninetenths of the total payments were made in bills and only one-tenth in money or banknotes.*4 Now this view by no means describes the essence of the matter A person who accepts and holds notes, grants no credit; he exchanges no present good for a future good. The immediately convertible note of a solvent bank is employable everywhere as a fiduciary medium instead of money in commercial transactions, and nobody draws a distinction between the money and the notes which he holds as cash. The note is a present good just as much as the money.

III.15.24

Notes might be issued by banks in either of two ways. One way is to exchange them for money. According to accounting principles, the bank here enters into a debit transaction and a credit transaction; but the transaction is actually a matter of indifference, since the new liability is balanced by an exactly corresponding asset. The bank cannot make a profit out of such a transaction. In fact such a transaction involves it in a loss, since it brings in nothing to balance the expense of manufacturing the notes and storing the stocks of money. The issue of fully backed notes can therefore only be carried on in conjunction with the issue of fiduciary media. This is the second possible way of issuing notes, to issue them as loans to persons in search of credit. According to the books, this, like the other, is a case of a credit and a debit transaction only.*5 It is true that this is not shown by the bank's balance sheet. On the credit side of the balance sheet are entered the loans granted and the state of the till, and on the debit side, the notes. We approach a better understanding of the true nature of the whole process if we go instead to the profit-and-loss account. In this account there is recorded a profit whose origin is suggestive—"profit on loans." When the bank lends other people's money as well as its own resources, part of this profit arises from the difference between the rates of interest that it pays its depositors and the rates that it charges its borrowers. The other part arises from the granting of circulation credit. It is the bank that makes this profit, not the holders of the notes. It is possible that the bank may retain the whole of it; but sometimes it shares it, either with the holders of the notes or, more probably, with the depositors. But in either case there is a profit.*6

III.15.25

Let us imagine a country whose monetary circulation consists in 100 million ducats. In this country a bank-of-issue is established. For the sake of simplicity, let us assume that the bank's own capital is invested as a reserve outside the banking business, and that it has to pay the annual interest on this capital to the state in return for the concession of the right of note issue—an assumption that does correspond closely with the actual situation of some banks-of-issue. Now let the bank have fifty million ducats paid into it and issue fifty million ducats' worth of one-ducat notes against this sum. But we must suppose that the bank does not allow the whole sum of fifty million ducats to remain in its vaults; it lends out forty million on interest to foreign businessmen. The interest on these loans consitutes its gross profit which is reduced only by the cost of manufacture of the notes, by administrative expenses, and the like. Is it possible in this case to say that the holders of the notes have granted credit to the foreign debtors of the bank, or to the bank itself?

III.15.26
Let us alter our example in a nonessential point. Let the bank lend the forty million not to foreigners but to persons within the country. One of these, A, is indebted to B for a certain sum, say the cost of goods which he has bought from him. A has no money at his disposal, but is ready to cede to B a claim maturing in three months, which he himself holds against P. Can B agree to this? Obviously only if he himself does not need for the next three months the sum of money which he could demand immediately, or if he has a prospect of finding somebody who can do without a corresponding sum of money for three months and is therefore ready to take over the claim against P. Or the situation might arise in which B wished to buy goods immediately from C, who was willing to permit postponement of payment for three months. In such a case, if C was really in agreement with the postponement, this could only be for one of the three reasons that might also cause B to be content with payment after the lapse of three months instead of immediate payment. All these, in fact, are cases of genuine credit transactions, of the exchange of present goods for future goods. Now the number and extent of these transactions is dependent on the quantity of present goods available; the total of the possible loans is limited by the total quantity of money and other goods available for this purpose. Loans can be granted only by those who have disposal over money or other economic goods which they can do without for a period. Now when the bank enters the arena by offering forty million ducats on the loan market, the fund available for lending pur poses is increased by exactly this sum; what immediate influence this must have on the rate of interest, should not need further explanation. Is it then correct to say that when the bank discounts bills it does nothing but substitute a convenient note currency for an inconvenient bill currency?*7 Is the banknote really nothing but a handier sort of bill of exchange? By no means. The note that embodies the promise of a solvent bank to pay a sum to the bearer on demand at any time, that is, immediately if desired, differs in an important point from the bill that contains the promise to pay a sum of money after the passage of a period of time. The sight bill, which as is well known) plays no part in the credit system, is comparable with the note; but not the time bill, which is the form regularly assumed by the bills that are usual in credit transactions. A person who pays the price of a purchased commodity in money, in notes, or by the transfer of any other claim payable on demand, has carried through a cash transaction; a person who pays the purchase price by the acceptance of a three-month bill has carried through a credit transaction.*8

III.15.27
Let us introduce a further unessential variation into our example, which will perhaps help to make the matter clearer. Let us assume that the bank has first issued notes to the value of fifty million ducats and received for them fifty million ducats in money; and now let us suppose it to place a further forty million ducats in its own notes on the loan market. This case is in every way identical with the two considered above.

III.15.28
The activity of note issue cannot in any way be described as increasing the demand for credit in the same sense as, say, an increase in the number of bills current. Quite the contrary. The bank-of-issue does not demand credit; it grants it. When an additional quantity of bills comes on to the market, this increases the demand for credit, and therefore raises the rate of interest. The placing of an additional quantity of notes on the loan market at first has the opposite effect; it constitutes an increase in the supply of credit and has therefore an immediate tendency to diminish the rate of interest.*9

III.15.29
It is one of the most remarkable phenomena in the history of political economy that this fundamental distinction between notes and bills could have passed unnoticed. It raises an important problem for investigators into the history of economic theory. And in solving this problem it will be their principal task to show how the beginnings of a recognition of the true state of affairs that are to be found even in the writings of the Classical School and were further developed by the Currency School, were destroyed instead of being continued by the work of those who came after.*10

III.15.30

6 Fiduciary Media and the Nature of Indirect Exchange

It should be sufficiently clear from what has been said that the traditional way of looking at the matter is but little in harmony with the peculiarities of fiduciary media. To regard notes

and current accounts, whether they are covered by money or not, as constituting the same phenomenon, is to bar the way to an adequate conception of the nature of these peculiarities. To regard noteholders or owners of current accounts as granters of credit is to fail to recognize the meaning of a credit transaction. To treat both notes and bills of exchange in general (that is, not merely sight bills) as "credit instruments" alike is to renounce all hope of getting to the heart of the matter.

III.15.31

On the other hand, it is a complete mistake to assert that the nature of an act of exchange is altered by the employment of fiduciary media. Not only those exchanges that are carried through by the cession of notes or current-account balances covered by money, but also those exchanges that are carried through by the employment of fiduciary media, are indirect exchanges involving the use of money. Although from the juristic point of view it may be significant whether a liability incurred in an act of exchange is discharged by physical transference of pieces of money or by cession of a claim to the immediate delivery of pieces of money, that is, by cession of a money substitute, this has no bearing upon the economic nature of the act of exchange. It would be incorrect to assert, for instance, that when payment is made by check, commodities are really exchanged against commodities, only without any of the crude clumsiness of primitive barter.*11 Here, just as in every other indirect exchange made possible by money, and in contrast to direct exchange, money plays the part of an intermediary between commodity and commodity. But money is an economic good with its own fluctuations in value. A person who acquires money or money substitutes will be affected by all the variations in their objective exchange value. This is just as true of payment by notes or checks as of the physical transference of pieces of money. But this is the only point that matters, and not the accidental circumstance whether money physically "enters into" the transaction as a whole. Anybody who sells commodities and is paid by means of a check and then immediately uses either the check itself or the balance that it puts at his disposal to pay for commodities that he has purchased in another transaction, has by no means exchanged commodities directly for commodities. He has undertaken two independent acts of exchange, which are connected no more intimately than any other two purchases.

III.15.32

It is possible that the terminology proposed is not the most suitable that could be found. This must be freely admitted. But it may at least be claimed for it that it opens the way to a better comprehension of the nature of the phenomena under discussion than those that have been previously employed. For if it is not quite true to say that inexact and superficial terminology has been chiefly responsible for the frequently unsatisfactory nature of the results of investigations into the theory of banking, still a good deal of the ill success of such investigations is to be laid to that account.

III.15.33

That economic theory puts questions of law and banking technique in the background and draws its boundaries differently from those drawn by jurisprudence or business administration is or should be self-evident. Reference to discrepancies between the above theory and the legal or technical nature of particular procedures is therefore no more relevant as an argument against the theory than economic considerations would be in the settlement of controversial juristic questions.

III.15.34

CHAPTER 16
The Evolution of Fiduciary Media

1 The Two Ways of Issuing Fiduciary Media

Thus fiduciary media are claims to the payment of a given sum on demand, which are not covered by a fund of money and whose legal and technical characteristics make them suitable for tender and acceptance instead of money in fulfillment of obligations that are in terms of money. As has already been suggested, it is not the dead letter of the law so much as actual business practice that counts, so that some things function as fiduciary media,

although they cannot be regarded as promises to pay money from the juristic point of view, because they nevertheless are in fact honored as such by somebody or other. We were able to show that, so far as they are not money certificates, even modern token coins and such kinds of money as the German thaler during the period from the establishment of the gold standard until its abolition, constitute fiduciary media and not money.

III.16.1

Fiduciary media may be issued in two ways: by banks, and otherwise. Bank fiduciary media are characterized by being dealt with as constituting a debt of the issuing body. They are entered as liabilities, and the issuing body does not regard the sum issued as an increase of its income or capital, but as an increase on the debit side of its account, which must be balanced by a corresponding increase on the credit side if the whole transaction is not to figure as a loss. This way of dealing with fiduciary media makes it necessary for the issuing body to regard them as part of its trading capital and never to spend them on consumption but always to invest them in business. These investments need not always be loans; the issuer may himself carry on a productive enterprise with the working capital that is put into his hands by the issue of fiduciary media. It is known that some deposit banks sometimes open deposit accounts without a money cover not only for the purpose of granting loans, but also for the purpose of directly procuring resources for production on their own behalf. More than one of the modern credit and commercial banks has invested a part of its capital in this manner, and the question of the right attitude in this case of the holders of the money substitutes, and of the state legislature that feels itself called upon to protect them, remains an open one. In earlier times there was a similar problem concerning banks issuing notes*12 until banking practice or the law prescribed short-term loans as "cover."

III.16.2

The issuer of fiduciary media may, however, regard the value of the fiduciary media put into circulation as an addition to his income or capital. If he does this, he will not take the trouble to cover the increase in his obligations due to the issue by setting aside a special credit fund out of his capital. He will pocket the profits of the issue, which in the case of token coinage is called seigniorage, as composedly as any other sort of income.

III.16.3

The only difference between the two ways of putting fiduciary media into circulation lies in the attitude of the issuer. Naturally, this cannot have any significance for the determination of the value of the fiduciary media. The difference between the methods of issue is a result of historical factors. Fiduciary media have sprung from two different roots: from the activities of the deposit and giro banks on the one hand, and from the state prerogative of minting on the other hand. The former is the source of notes and current accounts; the latter, that of convertible Treasury notes, token coins, and that current money of which the coinage is restricted, but which can be regarded neither as credit money nor as fiat money because it is actually convertible into money on demand to its full amount. Today the difference between the two methods of issuing is gradually disappearing, all the more as the state endeavors to act in the same way as the banks in issuing fiduciary media. Some states are already in the habit of devoting the profits of their coinage to special purposes and of refusing to treat them in any way as an increase of wealth.*13

III.16.4

Of the two types of money substitutes issued by the banks, the current account is the older. The banknote, in fact, is only a development of it. It is true that the two are different in the eyes of the law and the banker, but they do not differ at all in the eyes of the economist. The only distinctions between them are in those legal or banking or commercial peculiarities of the banknote which give it a special capacity of circulation. It is easily transferable and very like money in the way in which it is transferred. Banknotes were therefore able to outstrip the older money substitute, the current account, and penetrate into commerce with extraordinary rapidity. For medium and small payments they offer such great advantages that the current account was hardly able to maintain its ground beside them. It was not until the second half of the nineteenth century that the current account once more became important along with the banknote. In large transactions, check and clearing payments are often superior to notes. But the chief reason why the current account was able in part to expel the banknote must by no means be sought in any inherent requirements of business. The current account is not, as it is sometimes the fashion to assert without any reason or proof, a "higher" form of money substitute than the banknote. The banknote has been supplanted by the current account in many countries because its development was artificially

hindered and that of the current account artificially encouraged, the reason for this being that acceptance of the doctrines of the Currency principle led people to see danger for the stability of the exchange ratio between money and other economic goods only in the overissue of notes, and not in the excessive increase of bank deposits.

III.16.5

For the study of the credit system from the economic point of view, the contrast between notes and deposits is of minor importance. There are payments for which one or other form is the more suitable, and payments for which both forms are suitable. If their development had been allowed to take its own course, this fact would undoubtedly have been more evident than it is today when the attempt is sometimes made to bring about the employment of one or other kind of fiduciary medium by artificial means in circumstances where it appears the less appropriate technically.

III.16.6

2 Fiduciary Media and the Clearing System

That want of clarity concerning the nature of fiduciary media which constitutes the chief characteristic of the writings of the banking theorists and their epigoni, the modern writers on problems of banking theory, leads to a perpetual confusion between money substitutes and a series of institutions which reduce the demand for money in the narrower sense, and also to relative neglect of the differences that exist between money certificates and fiduciary media within the group of money substitutes proper.

III.16.7

The economic effect of an exchange that is carried out with the help of a certain quantity of a fungible good, can sometimes, if several persons have to transact business at the same time, be attained more indirectly in ways which, while they are formally of a more complicated legal structure, nevertheless fundamentally simplify the technical transaction and make it possible to dispense in particular instances with the physical presence of pieces of the medium of exchange. If A has to deliver a piece of cloth to B and receive a sheep from him for it, and if A at the same time has to give a sheep to C and receive from him a horse, these two exchanges can also be transacted if B gives a sheep to C on behalf and on account of A, so freeing himself from the obligation that he is under to give A a sheep in return for the cloth and A from the obligation that he is under to give C a sheep in return for the horse. Whereas the direct transaction of these two exchanges would have necessitated four transfers, this procedure necessitates only three.

III.16.8

The possibility of facilitating exchanges in this way is extraordinarily increased by extension of the custom of using certain goods as common media of exchange. For the number of cases in which anybody simultaneously owes and has a claim to a certain fungible good will increase with the number of cases in which one and the same fungible good—the common medium of exchange—is the object of exchange in individual transactions. Full development of the use of money leads at first to a splitting up into two acts of indirect exchange even of such transactions as could in any case have been carried through by direct exchange. The butcher and the baker, who could also exchange their products directly, often prefer to have their mutual relations take the form of an exchange carried through with the help of money which their other transactions assume also. The butcher sells meat to the baker for money and the baker sells bread to the butcher for money. This gives rise to reciprocal money claims and money obligations. But it is clear that a settlement can be arrived at here, not only by each party actually handing money over to the other, but also by means of offsetting, in which merely the balance remaining over is settled by payment of money. To complete the transaction in this way by full or partial cancellation of counterclaims offers important advantages in comparison with direct exchange: all the freedom connected with the use of money is combined with the technical simplicity that characterizes direct exchange transactions.

III.16.9

This method of carrying through indirect exchanges by cancellation of counterclaims is very greatly stimulated at the time when the cases where its employment is possible are increased by the fact that credit transactions, or the exchange of present goods for future goods, are becoming customary. When all exchanges have to be settled in ready cash, then

the possibility of performing them by means of cancellation is limited to the case exemplified by the butcher and baker and only then on the assumption, which of course only occasionally holds good, that the demands of both parties are simultaneous. At the most, it is possible to imagine that several other persons might join in and so a small circle be built up within which drafts could be used for the settlement of transactions without the actual use of money. But even in this case simultaneity would still be necessary, and, several persons being involved, would be still seldomer achieved.

III.16.10

These difficulties could not be overcome until credit set business free from dependence on the simultaneous occurrence of demand and supply. This, in fact, is where the importance of credit for the monetary system lies. But this could not have its full effect so long as all exchange was still direct exchange, so long even as money had not established itself as a common medium of exchange. The instrumentality of credit permits transactions between two persons to be treated as simultaneous for purposes of settlement even if they actually take place at different times. If the baker sells bread to the cobbler daily throughout the year and buys from him a pair of shoes on one occasion only, say at the end of the year, then the payment on the part of the baker, and naturally on that of the cobbler also, would have to be made in cash, if credit did not provide a means first for delaying the one party's liability and then for settling it by cancellation instead of by cash payment.

III.16.11

Exchanges made with the help of money can also be settled in part by offsetting if claims are transferred within a group until claims and counterclaims come into being between the same persons, these being then canceled against each other, or until the claims are acquired by the debtors themselves and so extinguished. In interlocal and international dealing in bills, which has been developed in recent years by the addition of the use of checks and in other ways which have not fundamentally changed its nature, the same sort of thing is carried out on an enormous scale. And here again credit increases in a quite extraordinary fashion the number of cases in which such offsetting is feasible.*14 In all these cases we have an exchange made with the help of money which is nevertheless transacted without the actual use of money or money substitutes simply by means of a process of offsetting between the parties. Money in these cases is still a medium of exchange, but its employment in this capacity is independent of its physical existence. Use is made of money, but not physical use of actually existing money or money substitutes. Money which is not present performs an economic function; it has its effect solely by reason of the possibility of its being able to be present.

III.16.12

The reduction of the demand for money in the broader sense which is brought about by the use of offsetting processes for settling exchanges made with the help of money, without affecting the function performed by money as a medium of exchange, is based upon the reciprocal cancellation of claims to money. The use of money is avoided because claims to money are transferred instead of actual money. This process is continued until claim and debt come together, until creditor and debtor are united in the same person. Then the claim to money is extinguished, since nobody can be his own creditor or his own debtor.*15 The same result may be reached at an earlier stage by reciprocal cancellation, that is by the liquidation of counterclaims by a process of offsetting.*16 In either case the claim to money ceases to exist, and then, and not until then, is the act of exchange which gave birth to the claim finally completed.

III.16.13

Any transfer of a claim which does not bring it nearer to being extinguished by cancellation or offsetting cannot decrease the demand for money. In fact, if the transfer of the claim is not instead of payment in money, then it is on the contrary the source of a fresh demand for money. Now cession of claims instead of payment in money has, apart from the use of money substitutes, never been of very great commercial importance. As far as claims that are already due are concerned, the holder will as a rule prefer to call in the outstanding sums of money, because he will invariably find it easier to buy (and carry through other transactions in the market) with money or money substitutes than with claims whose goodness has not been indisputably established. But if the holder does in exceptional cases transfer such a claim by way of payment, then the new holder will be in the same position. A further hindrance to the transfer of claims to money that are not yet due instead of payment in money is the fact that such claims can be accepted only by such persons as are able to

agree to postponement of payment; to rest content with a claim that is not yet due, when immediate payment could be enforced, is to grant credit.

III.16.14
Commercial requirements had previously made use of the legal institution of the bill in a way that caused it to circulate in a manner fairly similar to that of fiduciary media. Toward the end of the eighteenth and at the beginning of the nineteenth century bills were current in the European commercial centers which were endorsed by the merchants in place of payment in money.*17 Since it was the general custom to make payments in this way, anybody could accept a bill that still had some time to run even when he wanted cash immediately; for it was possible to reckon with a fair amount of certainty that those to whom payments had to be made would also accept a bill not yet mature in place of ready money. It is perhaps hardly necessary to add that in all such transactions the element of time was of course taken into consideration, and discount consequently allowed for. Now it is true that this might increase the technical difficulties in handling the circulatory apparatus, which was already not an easy matter to deal with for other reasons, such, for example, as the different amounts of the bills. But, on the other hand, it offered a profit to any holder who did not pass the bill on immediately but kept it for a while, even if only for a very short while, in his portfolio. Used in this way, the bill was able to make up to a certain extent for the lack of fiduciary media. Even though it might not be due for a long time ahead, the holder could regard it as liquid, because he could pass it on at any time.

III.16.15
Despite this, bills of this sort were not fiduciary media in the sense in which notes or deposits are. They lack the characteristic features and properties which enabled the fiduciary medium, the indefinitely augmentable product of the arbitrary issuing activity of the banks, to become a complete substitute for money for business purposes. It is true that the cooperation of issuers and acceptors can give the circulation of bills the capacity of unlimited augmentation and unlimited lease of life through the agency of bill jobbing and regular prolongation, even if technical difficulties alone are sufficient to prevent the bills from ever being used in business to the same extent as money substitutes. But every increase in the amount of bills in circulation makes negotiation of individual bills more difficult. It reduces the resources of the market. In fact, the holder of a bill, as distinct from the holder of a note or of a current account, is a creditor A person who accepts a bill must examine the standing of the previous endorser, and also that of the issuer and the others who are liable for the bill, but in particular the primary acceptor Whoever passes a bill on, in endorsing it undertakes responsibility for the payment of the amount of the bill. The endorsement of the bill is in fact not a final payment; it liberates the debtor to a limited degree only. If the bill is not paid then his liability is revived in a greater degree than before. But the peculiar rigor of the law relating to its enforcement and the responsibility of its signatories could not be eliminated, for it was these very characteristics alone that had made the bill a suitable instrument for the cession, in place of money payment, of unmatured claims for which the common-law provisions regarding indebtedness are little suited. To whatever extent the custom of issuing or endorsing bills in place of payment in money may have established itself, every single payment that was made in this way nevertheless retained the character of a credit transaction. It was necessary in each individual case for the parties to the transaction to begin by coming to a special agreement as to the present price to be paid for the claim that would not fall due until some future time; if the amount of bills in circulation increased greatly, or if doubts happened to arise concerning the solidity of the position of any of the signatories, then it became more difficult to place the bill even on fairly tolerable terms. Issuer and acceptor had then in addition to make arrangements for covering the bill before it fell due, even if only by negotiating a prolongation bill. There is none of this in the case of fiduciary media, which pass like money from hand to hand without any sort of friction.

III.16.16
The modern organization of the payment system makes use of institutions for systematically arranging the settlement of claims by offsetting processes. There were beginnings of this as early as the Middle Ages, but the enormous development of the clearinghouse belongs to the last century. In the clearinghouse, the claims continuously arising between members are subtracted from one another and only the balances remain for settlement by the transfer of money or fiduciary media. The clearing system is the most important institution for diminishing the demand for money in the broader sense.

III.16.17
In the literature of the banking system it is not as a rule customary to draw a sufficient distinction between the diminution of the demand for money in the broader sense which is due to the operations of the clearinghouses and the diminution of the demand for money in the narrower sense which is due to the extension of the use of fiduciary media. This is the cause of much obscurity.

III.16.18

3 Fiduciary Media in Domestic Trade

In the domestic trade of most civilized countries, the actual use of money for transacting exchanges made with the help of money has been very largely superseded by the use of money substitutes. And among the money substitutes, fiduciary media play a constantly increasing part. At the same time, the number of exchanges made with the help of money which are settled by the offsetting of counterclaims is growing also. There are countries in which nearly all the internal payments that are not settled by the clearing process are made without the use of money merely with the aid of banknotes and deposits that are not covered by money, of token coins in the proper sense of the word, and of other coins convertible on demand into money. In other countries, again, the fiduciary medium has not yet been developed to a like extent; but if we disregard those countries in which the insecurity of the law hinders the birth of that confidence in the soundness of the issuer which is the sine qua non for the circulation of money substitutes, then we shall find no part of the world in which a large proportion of the internal payments are not made by means of the use of fiduciary media alone, without the actual transference of money. It is only in medium-sized transactions that there is still room for the transference of actual money. In Germany and England before the war it was usual to make payments of twenty to one hundred marks and £1 and £5 by the transference of gold coins. Smaller and larger payments were made almost exclusively by the cession of token coins or notes or deposits which were only partly covered by money. It was the same in other countries.

III.16.19
The fact that money continued to be in actual circulation at all in a series of states, like Germany and England, and was not entirely superseded by fiduciary media and money certificates, was due solely to legislative intervention. For reasons which were connected with certain views on the nature of notes, it was thought that the circulation of notes of small denominations ought to be opposed.*18 The battle against the one-pound note in England ended with the complete victory of the sovereign, and this victory had a significance outside England, too, for the disfavor in which small banknotes were held for decades on the continent of Europe was based upon English opinion. It is certain that in those states which have a sound administration of justice and a developed banking system, the employment of actual money in commerce could be replaced without difficulty by the issue of a corresponding quantity of small notes.

III.16.20
In some countries in which the actual transfer of money has been completely superseded by fiduciary media and money certificates, this end has been systematically sought and attained in a peculiar fashion and under very peculiar conditions. The silver-standard countries—India, primarily, but the situation was similar in other Asiatic states—after the great controversy about the standards had been decided in favor of monometallism, were forced to accept the world gold standard. But there were extraordinary difficulties in the way of the transition to a monetary system in imitation of English of German institutions. To introduce gold money in the circulation of these countries would have necessitated the conveyance of enormous quantities of gold to them, which would not have been practicable without serious convulsion of the European money market and would have meant great sacrifice. The governments of these countries, however, had to endeavor at all costs on the one hand not to raise the value of gold (so as not to disturb the European markets), and on the other hand not to reduce the value of silver any more than was necessary. The English government in India did not dare to undertake anything which might have had an unfavorable influence on the London money market; but, having regard to India's Asiatic competitors, which presumably would remain on the silver standard, neither did it dare to take any steps which would expedite the fall in the price of silver and consequently weaken for a time, even if only in appearance, the ability of India to compete with China, Japan, the Straits Settlements, and the other silver

countries. It therefore had the task of conducting India's transition to the gold standard without buying gold in considerable quantities or selling silver.

III.16.21

The problem was not insoluble. Within limits, the circumstances were similar to those of the bimetallic countries which had discontinued the free coinage of silver at the end of the seventies. And besides, careful scientific consideration of the problem showed that it was possible to create a gold standard without a gold currency; that it was enough to discontinue the free coinage of silver and to announce its convertibility into gold at a specific rate, making this effective by establishing a suitable conversion fund, in order to give the country a gold standard which would differ from that of England only in the lower level of the stock of gold. It was only necessary to go back to the writings of Ricardo in order to find the plan for such a currency system already worked out in detail. Lindsay*19 and Probyn*20 followed this path and, building upon Ricardo, worked out plans for this kind of currency regulation. Both wanted to close the mints to silver and to make the rupee convertible into gold at a fixed ratio. For the future, only the rupee was to be legal tender. The two proposals differed on some minor points, of which the most important was that while Probyn held it necessary that the rupee should be convertible into gold in India itself, Lindsay was of the opinion that it would suffice if the conversion were to be in London from a gold reserve to be established there. Both proposals were rejected, by the Indian government and by the commissions appointed to inquire into the Indian monetary system. The opinion was expressed that a normal gold standard necessitates an actual gold currency, and that the lack of such a currency would awaken mistrust.*21

III.16.22

The report of the commission of 1898 was signed by the most eminent experts of the day; its comments on the recommendations of Probyn and Lindsay were supported on the decisive point by the expert opinions of the biggest bankers in the British Empire. The course of events vindicated the theorists, however, not the statesmen and great financiers who had regarded them with amused commiseration. What was ultimately done in India corresponded roughly and on the whole to the recommendations of Probyn and Lindsay, even if there were variations in detail. And the monetary systems of other countries that had previously been on a silver standard were organized in a precisely similar manner The present currency system of India, of the Straits Settlements, of the Philippines, and of the other Asiatic countries which have followed their example, is superficially characterized by the fact that in domestic trade, payments in money, that is, in gold, do not occur at all or at least are far rarer than in the gold-standard countries of Europe and America, and even in these the actual circulation of gold is only quite small in proportion to the total of all the payments made with the help of money. Under the system in India, payments are made, along with notes, checks, and giro transfers, chiefly in silver coins, which are partly relics of the time of the silver standard, and partly minted by the government for the account of the state and to the benefit of the Treasury, which receives the considerable profits of the coinage. A conversion fund, which is set up and administered by the government, exchanges these silver coins at a fixed ratio for gold, gold securities, or other claims to money, payable on demand, while, on the other hand, it issues such silver coins in exchange for gold in unlimited quantities at the same rate, allowance being made for the expenses of storage, transportation, etc. The minor details of this arrangement differ in different countries; but the differences in its legal or banking technique are insignificant as far as its nature is concerned. It is, for example, of no further significance, whether or not the silver coins are converted on the basis of a legal obligation. All that matters is whether the conversion actually does take place on demand.*22

III.16.23

There exists no fundamental difference at all between the currency system of these Asiatic and American countries and that that the European gold-standard countries once had. Under both systems, payments are made without the actual transference of money by the aid of the surrender of fiduciary media. The fact that in England and Germany the actual transference of money also played a certain part for medium-sized payments, whereas in India and in the Philippines the number of actual transfers of money is scarcely worth mentioning, or that in the former countries the proportion of the circulation that was not covered by money was smaller than in the latter, is quite inessential; it is a difference that is merely quantitative, not qualitative. Of no great relevance is the circumstance that the fiduciary media were in the one case predominantly banknotes and checks and are in the

other case predominantly silver coins. The silver rupee is in truth nothing but a metallic note, for the conversion of which its issuer, the state, is responsible.*23

III.16.24

Following up a train of thought of Ricardo's, who was the first to develop the plan of this monetary system more than a hundred years ago,*24 it is customary to speak of it as the gold-exchange standard. The aptness of this designation can only be conceded if it is intended to stress the peculiarities in banking and currency technique that characterize the system. But it is a name that must be rejected if it is intended to indicate the existence of a fundamental difference from what used to be the English and German type of gold standard. It is not correct to assert that in these countries gold functions merely as a measure of prices while the silver coins are used as a common medium of exchange. We know what little justification there is for speaking of a price-measuring function of money. In Ricardo's sense, it was possible to speak of measurement and measures of value; from the point of view of the subjective theory of value these and similar concepts are untenable. In India and Austria-Hungary and in all other countries with similar currency and banking systems, gold is or was just as much a common medium of exchange as in prewar England or Germany; the difference between the two systems is only one of degree, not one of kind.

III.16.25

4 Fiduciary Media in International Trade

The practice of making payments by the writing off or reciprocal balancing of claims is not restricted by the boundaries of states or countries. It was in fact in trade between different areas that the need for it was earliest and most strongly felt. The transportation of money always involves not inconsiderable cost, loss of interest, and risk. If the claims arising out of various transactions are liquidated not by the actual transference of money, but by balancing or offsetting, then all these expenses and dangers can be avoided. This provided an extraordinarily effective motive for developing those methods of making payments over long distances which saved the transference of sums of money. Quite early we find the use of bills established for interlocal payments; then in addition we later find checks, and ordinary and cable transfers, all forming the basis of an interlocal clearing system which worked through the ordinary free play of the market without the help of a special clearinghouse. When making payments within a given locality the advantages for the individual of the method of settling transactions by the clearing process and therefore without the use of cash are smaller than those when making payments between localities, and therefore it was a longer time before the system of reciprocal cancellation came into full operation with the establishment of clearinghouses.

III.16.26

If the clearing system has without difficulty transcursed political boundaries and created for itself a world-embracing organization in the international bill and check system, the validity of the fiduciary media, like that of all money substitutes, is nationally limited. There are no money substitutes, and so no fiduciary media, that are recognized internationally and consequently able to take the place of money in international trade for settling the balances that remain over after the clearing process. That is often overlooked in discussions of the present position of the international system of payments and the possibilities of its future development. Here again, in fact, the confusion creeps in, that has already been criticized adversely, between the system of reciprocal cancellation and the circulation of fiduciary media. This is most clear in the usual arguments about international giro transactions. In domestic giro transactions, payments are effected by the transfer of money substitutes, which are often fiduciary media, namely, the balances of the members at the giro bank. In international transactions, the money substitute is lacking, and even the international clearing system that is recommended in various quarters is not intended to introduce one. Rather it should be pointed out that this so-called international giro system—which incidentally was done away with again by the inflation during the war—while it may have changed the external form of the traditional manner of settling international monetary claims, has not changed in nature. When banks of various countries agree to give their clients the right to undertake direct transference from their balances to the balances of the clients of foreign banks, this may quite well constitute a new and additional method of international settlement of accounts. A Viennese desirous of paying a sum of money to somebody in Berlin was previously able either to use an international money order or to go to the exchange and buy a bill on Berlin and send it to his creditor As a rule he would have

made use of the intermediate services of a bank, which for its part would perform the transaction through the purchase of a foreign bill or a check. Later, if he was a member of the check system of the Austrian Post Office Savings Bank and his creditor belonged to that of the German post office, he would have been able to make the transfer more simply by sending the appropriate order on the Vienna office of the Post Office Savings Bank. This might well be more convenient and better suited to the demands of business than the only method that was once usual; but, however excellent a method, it was not a new method of international monetary intercourse. For the balances of this international giro system, if they could not be paid by bills, had to be paid by the actual transference of money. It is not true that the international giro system has decreased the international transportation of money. Even before its introduction, the Viennese who wanted to pay money to somebody in Berlin did not buy twenty-mark pieces and send them to Berlin in a parcel.

III.16.27

The only thing calculated to create international money substitutes and subsequently international fiduciary media would be the establishment of an international giro bank or bank-of-issue. When it became possible to use the notes issued by the world bank and the accounts opened by it for the settlement of money claims of all kinds, there would no longer be any need to settle the national balances of payments by transportation of money. The actual transference of money could be superseded by the transference of the notes issued by the world bank or of checks giving disposal over the issuer's account with the world bank, or even by simple entries in the books of the world bank. The balances of the international "clearinghouse," which already exists today although it is not concentrated in any one locality and has not the rigid organization of the national clearinghouses, would then be paid off in the same way as those of the national clearinghouses are at present.

III.16.28

Proposals have been made again and again for the creation of international fiduciary media through the establishment of an interstate bank. It is true that this must not be taken to include every project for extending the international giro system in the sense in which this word is commonly used. Nevertheless, in certain writings which demand the foundation of a world bank, or at least of an interstate banking organization, there gleams the idea of an international fiduciary medium.*25 The problems of organization raised by the establishment of such an international institution could be solved in various ways. The establishment of the world bank as a special form of organization and as an independent legal body would probably be the simplest form for the new creation. It would, however, also be possible, apart from this, to establish a special central authority for administering and investing the sums of money paid in to open the accounts, and for issuing the money substitutes. An attempt could be made to avoid the obstructions which the susceptibilities of national vanity would probably oppose to the local concentration of the business of the bank by leaving the reserves of the world giro authority and the world issuing authority in the keeping of the separate national banks. In the reserves of every central bank a distinction would then have to be made between two sums: one, which would have to serve as a basis for the world organization of the system of payments, and over which only the authorities of the latter would have power of disposal; and a second, which would continue to be at the service of the national monetary system. It would even be possible to go still further and leave the issue of international notes and other money substitutes to the individual banks, which would only be required in doing this to follow the instructions given by the authorities of the world organization. It is not our task to investigate which of the various possibilities is the most practical; it is its nature alone that interests us, not the actual form it might take.

III.16.29

Special reference must nevertheless be made to one point. If the balances in the books of the world bank are to be acquired only by cash payment of the full sum in money, or by transfer from some other account that has been acquired by cash payment of the full sum in money, and if the world bank is to issue notes only in exchange for money, then its establishment may certainly render unnecessary the transportation of quantities of money (which still plays a large part nowadays in the international payments system), but it would not have the effect of economizing money payments. It is true that it would be able to reduce the demand for money, because transferences would perhaps be completed more quickly and with less friction. But, as before, the payments that were made through the bank would involve the actual use of money. Of course, the money would remain in the vaults of the world bank and only the right to demand its surrender would be transferred. But the amount of the payments would be arithmetically limited by the amount of the money

deposits in the bank. The possibility of trans ferring sums of money would be bound up with the existence of these sums of money in actual monetary shape. In order to free the international monetary system from these fetters the world bank would have to be granted the right of issuing notes as loans also and of opening accounts on credit; that is to say, the right of partly lending out its reserves of money. Then, and not until then, would the interstate system of payments be given a fiduciary medium such as is already possessed by the domestic system; it would become independent of the quantity of money in existence.

III.16.30
The realization of a world-bank project developed in this way is opposed by tremendous obstacles which it would hardly be possible to surmount in the near future. The least of these obstacles is constituted by the variety of the kinds of money that are in use in the individual states. Nevertheless, in spite of the inflation that was created by the world war and its consequences, we are every day approaching nearer and nearer to the situation of having a world monetary unit based on the metallic money gold. More important are the difficulties due to political considerations. The establishment of a world bank might come to grief owing to the uncertainty of its position in international law. No state would wish to incur the danger of the accounts of its citizens being impounded by the world bank in case of war. This involves questions of primary importance and therefore no provisions of international law, however surrounded with precautions they might be, could satisfy the individual states so far as to overcome their opposition to membership in such an organization.*26

III.16.31
Nevertheless, the biggest difficulty in the way of issuing international credit instruments lies in the circumstance that it would scarcely be possible for the states that had joined the world-banking system to come to an agreement concerning the policy to be followed by the bank in issuing the credit instruments. Even the question of determining the quantity of them to be issued would disclose irreconcilable antagonisms. Under present conditions, therefore, proposals for the establishment of a world bank with power of issuing fiduciary media attract hardly any notice.*27

III.16.32

PART FOUR
MONETARY RECONSTRUCTION

(This part was written in 1952 and first appeared in the 1953 American edition of Yale University Press)

CHAPTER 21
The Principle of Sound Money

1 The Classical Idea of Sound Money

The principle of sound money that guided nineteenth-century monetary doctrines and policies was a product of classical political economy. It was an essential part of the liberal program as developed by eighteenth-century social philosophy and propagated in the following century by the most influential political parties of Europe and America.

IV.21.1
The liberal doctrine sees in the market economy the best, even the only possible, system of economic organization of society. Private ownership of the means of production tends to shift control of production to the hands of those best fitted for this job and thus to secure for all members of society the fullest possible satisfaction of their needs. It assigns to the consumers the power to choose those purveyors who supply them in the cheapest way with the articles they are most urgently asking for and thus subjects the entrepreneurs and the owners of the means of production, namely, the capitalists and the landowners, to the

sovereignty of the buying public. It makes nations and their citizens free and provides ample sustenance for a steadily increasing population.

IV.21.2
As a system of peaceful cooperation under the division of labor, the market economy could not work without an institution warranting to its members protection against domestic gangsters and external foes. Violent aggression can be thwarted only by armed resistance and repression. Society needs an apparatus of defense, a state, a government, a police power. Its undisturbed functioning must be safeguarded by continuous preparedness to repel aggressors. But then a new danger springs up. How keep under control the men entrusted with the handling of the government apparatus lest they turn their weapons against those whom they were expected to serve? The main political problem is how to prevent the rulers from becoming despots and enslaving the citizenry. Defense of the individual's liberty against the encroachment of tyrannical governments is the essential theme of the history of Western civilization. The characteristic feature of the Occident is its peoples' pursuit of liberty, a concern unknown to Orientals. All the marvelous achievements of Western civilization are fruits grown on the tree of liberty.

IV.21.3
It is impossible to grasp the meaning of the idea of sound money if one does not realize that it was devised as an instrument for the protection of civil liberties against despotic inroads on the part of governments. Ideologically it belongs in the same class with political constitutions and bills of rights. The demand for constitutional guarantees and for bills of rights was a reaction against arbitrary rule and the nonobservance of old customs by kings. The postulate of sound money was first brought up as a response to the princely practice of debasing the coinage. It was later carefully elaborated and perfected in the age which—through the experience of the American continental currency, the paper money of the French Revolution and the British restriction period—had learned what a government can do to a nation's currency system.

IV.21.4
Modern cryptodespotism, which arrogates to itself the name of liberalism, finds fault with the negativity of the concept of freedom. The censure is spurious as it refers merely to the grammatical form of the idea and does not comprehend that all civil rights can be as well defined in affirmative as in negative terms. They are negative as they are designed to obviate an evil, namely omnipotence of the police power, and to prevent the state from becoming totalitarian. They are affirmative as they are designed to preserve the smooth operation of the system of private property, the only social system that has brought about what is called civilization.

IV.21.5
Thus the sound-money principle has two aspects. It is affirmative in approving the market's choice of a commonly used medium of exchange. It is negative in obstructing the government's propensity to meddle with the currency system.

IV.21.6
The sound-money principle was derived not so much from the Classical economists' analysis of the market phenomena as from their interpretation of historical experience. It was an experience that could be perceived by a much larger public than the narrow circles of those conversant with economic theory. Hence the sound-money idea became one of the most popular points of the liberal program. Friends and foes of liberalism considered it one of the essential postulates of a liberal policy.

IV.21.7
Sound money meant a metallic standard. Standard coins should be in fact a definite quantity of the standard metal as precisely determined by the law of the country. Only standard coins should have unlimited legal-tender quality. Token coins and all kinds of moneylike paper should be, on presentation and without delay, redeemed in lawful standard money.

IV.21.8
So far there was unanimity among the supporters of sound money. But then the battle of the standards arose. The defeat of those favoring silver and the unfeasibility of bimetallism eventually made the sound-money principle mean the gold standard. At the end of the nineteenth century there was all over the world unanimity among businessmen and

statesmen with regard to the indispensability of the gold standard. Countries which were under a fiat-money system or under the silver standard considered adoption of the gold standard the foremost goal of their economic policy. Those who disputed the eminence of the gold standard were dismissed as cranks by the representatives of the official doctrine—professors, bankers, statesmen, editors of the great newspapers and magazines.

IV.21.9
It was a serious blunder of the supporters of sound money to adopt such tactics. There is no use in dealing in a summary way with any ideology however foolish and contradictory it may appear Even a manifestly erroneous doctrine should be refuted by careful analysis and the unmasking of the fallacies implied. A sound doctrine can win only by exploding the delusions of its adversaries.

IV.21.10
The essential principles of the sound-money doctrine were and are impregnable. But their scientific support in the last decades of the nineteenth century was rather shaky. The attempts to demonstrate their reasonableness from the point of view of the Classical value theory were not very convincing and made no sense at all when this value concept had to be discarded. But the champions of the new value theory for almost half a century restricted their studies to the problems of direct exchange and left the treatment of money and banking to routinists unfamiliar with economics. There were treatises on catallactics which dealt only incidentally and cursorily with monetary matters, and there were books on currency and banking which did not even attempt to integrate their subject into the structure of a catallactic system.*1 Finally the idea evolved that the modern doctrine of value, the subjectivist or marginal utility doctrine, is unable to explain the problems of money's purchasing power.*2

IV.21.11
It is easy to comprehend how under such circumstances even the least tenable objections raised by the advocates of inflationism remained unanswered. The gold standard lost popularity because for a very long time no serious attempts were made to demonstrate its merits and to explode the tenets of its adversaries.

IV.21.12

2 The Virtues and Alleged Shortcomings of the Gold Standard

The excellence of the gold standard is to be seen in the fact that it renders the determination of the monetary unit's purchasing power independent of the policies of governments and political parties. Furthermore, it prevents rulers from eluding the financial and budgetary prerogatives of the representative assemblies. Parliamentary control of finances works only if the government is not in a position to provide for unauthorized expenditures by increasing the circulating amount of fiat money. Viewed in this light, the gold standard appears as an indispensable implement of the body of constitutional guarantees that make the system of representative government function.

IV.21.13
When in the 1850s gold production increased considerably in California and Australia, people attacked the gold standard as inflationary. In those days Michel Chevalier, in his book Probable Depreciation of Gold, recommended the abandonment of the gold standard, and Béranger dealt with the same subject in one of his poems. But later these criticisms subsided. The gold standard was no longer denounced as inflationary but on the contrary as deflationary. Even the most fanatical champions of inflation like to disguise their true intentions by declaring that they merely want to offset the contractionist pressure which the allegedly insufficient supply of gold tends to produce.

IV.21.14
Yet it is clear that over the last generations there has prevailed a tendency of all commodity prices and wage rates to rise. We may neglect dealing with the economic effects of a general tendency of money prices and money wages to drop.*3 For there is no doubt that what we have experienced over the last hundred years was just the opposite, namely, a secular tendency toward a drop in the monetary unit's purchasing power, which was only temporarily interrupted by the aftermath of the breakdown of a boom intentionally created by credit expansion. Gold became cheaper in terms of commodities, not dearer. What the foes of the

gold standard are asking for is not to reverse a prevailing tendency in the determination of prices, but to intensify very considerably the already prevailing upward trend of prices and wages. They simply want to lower the monetary unit's purchasing power at an accelerated pace.

IV.21.15
Such a policy of radical inflationism is, of course, extremely popular. But its popularity is to a great extent due to a misapprehension of its effects. What people are really asking for is a rise in the prices of those commodities and services they are selling while the prices of those commodities and services which they are buying remain unchanged. The potato grower aims at higher prices for potatoes. He does not long for a rise in other prices. He is injured if these other prices rise sooner or in greater proportion than the price of potatoes. If a politician addressing a meeting declares that the government should adopt a policy which makes prices rise, his hearers are likely to applaud. Yet each of them is thinking of a different price rise.

IV.21.16
From time immemorial inflation has been recommended as a means to alleviate the burdens of poor worthy debtors at the expense of rich harsh creditors. However, under capitalism the typical debtors are not the poor but the well-to-do owners of real estate, of firms, and of common stock, people who have borrowed from banks, savings banks, insurance companies, and bondholders. The typical creditors are not the rich but people of modest means who own bonds and savings accounts or have taken out insurance policies. If the common man supports anticreditor measures, he does it because he ignores the fact that he himself is a creditor. The idea that millionaires are the victims of an easy-money policy is an atavistic remnant.

IV.21.17
For the naive mind there is something miraculous in the issuance of fiat money. A magic word spoken by the government creates out of nothing a thing which can be exchanged against any merchandise a man would like to get. How pale is the art of sorcerers, witches, and conjurors when compared with that of the government's Treasury Department! The government, professors tell us, "can raise all the money it needs by printing it."*4 Taxes for revenue, announced a chairman of the Federal Reserve Bank of New York, are "obsolete."*5 How wonderful! And how malicious and misanthropic are those stubborn supporters of outdated economic orthodoxy who ask governments to balance their budgets by covering all expenditures out of tax revenue!

IV.21.18
These enthusiasts do not see that the working of inflation is conditioned by the ignorance of the public and that inflation ceases to work as soon as the many become aware of its effects upon the monetary unit's purchasing power. In normal times, that is in periods in which the government does not tamper with the monetary standard, people do not bother about monetary problems. Quite naively they take it for granted that the monetary unit's purchasing power is "stable." They pay attention to changes occurring in the money prices of the various commodities. They know very well that the exchange ratios between different commodities vary. But they are not conscious of the fact that the exchange ratio between money on the one side and all commodities and services on the other side is variable too. When the inevitable consequences of inflation appear and prices soar, they think that commodities are becoming dearer and fail to see that money is getting cheaper. In the early stages of an inflation only a few people discern what is going on, manage their business affairs in accordance with this insight, and deliberately aim at reaping inflation gains. The overwhelming majority are too dull to grasp a correct interpretation of the situation. They go on in the routine they acquired in noninflationary periods. Filled with indignation, they attack those who are quicker to apprehend the real causes of the agitation of the market as "profiteers" and lay the blame for their own plight on them. This ignorance of the public is the indispensable basis of the inflationary policy. Inflation works as long as the housewife thinks: "I need a new frying pan badly. But prices are too high today; I shall wait until they drop again." It comes to an abrupt end when people discover that the inflation will continue, that it causes the rise in prices, and that therefore prices will skyrocket infinitely. The critical stage begins when the housewife thinks: "I don't need a new frying pan today; I may need one in a year or two. But I'll buy it today because it will be much more expensive later." Then the catastrophic end of the inflation is close. In its last stage the housewife thinks: "I

don't need another table; I shall never need one. But it's wiser to buy a table than keep these scraps of paper that the government calls money, one minute longer."

IV.21.19
Let us leave the problem of whether or not it is advisable to base a system of government finance upon the intentional deception of the immense majority of the citizenry. It is enough to stress the point that such a policy of deceit is self-defeating. Here the famous dictum of Lincoln holds true: You can't fool all of the people all of the time. Eventually the masses come to understand the schemes of their rulers. Then the cleverly concocted plans of inflation collapse. Whatever compliant government economists may have said, inflationism is not a monetary policy that can be considered as an alternative to a sound-money policy. It is at best a temporary expedient. The main problem of an inflationary policy is how to stop it before the masses have seen through their rulers' artifices. It is a display of considerable naivety to recommend openly a monetary system that can work only if its essential features are ignored by the public.

IV.21.20
The index-number method is a very crude and imperfect means of "measuring" changes occurring in the monetary unit's purchasing power. As there are in the field of social affairs no constant relations between magnitudes, no measurement is possible and economics can never become quantitative.*6 But the index-number method, notwithstanding its inadequacy, plays an important role in the process which in the course of an inflationary movement makes the people inflation-conscious. Once the use of index numbers becomes common, the government is forced to slow down the pace of the inflation and to make the people believe that the inflationary policy is merely a temporary expedient for the duration of a passing emergency, one that will be stopped before long. While government economists still praise the superiority of inflation as a lasting scheme of monetary management, governments are compelled to exercise restraint in its application.

IV.21.21
It is permissible to call a policy of intentional inflation dishonest as the effects sought by its application can be attained only if the government succeeds in deceiving the greater part of the people about the consequences of its policy. Many of the champions of interventionist policies will not scruple greatly about such cheating; in their eyes what the government does can never be wrong. But their lofty moral indifference is at a loss to oppose an objection to the economist's argument against inflation. In the economist's eyes the main issue is not that inflation is morally reprehensible but that it cannot work except when resorted to with great restraint and even then only for a limited period. Hence resort to inflation cannot be considered seriously as an alternative to a permanent standard such as the gold standard is.

IV.21.22
The proinflationist propaganda emphasizes nowadays the alleged fact that the gold standard collapsed and that it will never be tried again: nations are no longer willing to comply with the rules of the gold-standard game and to bear all the costs which the preservation of the gold standard requires.

IV.21.23
First of all there is need to remember that the gold standard did not collapse. Governments abolished it in order to pave the way for inflation. The whole grim apparatus of oppression and coercion—policemen, customs guards, penal courts, prisons, in some countries even executioners—had to be put into action in order to destroy the gold standard. Solemn pledges were broken, retroactive laws were promulgated, provisions of constitutions and bills of rights were openly defied. And hosts of servile writers praised what the governments had done and hailed the dawn of the fiat-money millennium.

IV.21.24
The most remarkable thing about this allegedly new monetary policy, however, is its complete failure. True, it substituted fiat money in the domestic markets for sound money and favored the material interests of some individuals and groups of individuals at the expense of others. It furthermore contributed considerably to the disintegration of the international division of labor. But it did not succeed in eliminating gold from its position as the international or world standard. If you glance at the financial page of any newspaper you discover at once that gold is still the world's money and not the variegated products of the divers government printing offices. These scraps of paper are the more appreciated the more

stable their price is in terms of an ounce of gold. Whoever today dares to hint at the possibility that nations may return to a domestic gold standard is cried down as a lunatic. This terrorism may still go on for some time. But the position of gold as the world's standard is impregnable. The policy of "going off the gold standard" did not relieve a country's monetary authorities from the necessity of taking into account the monetary unit's price in terms of gold.

IV.21.25

What those authors who speak about the rules of the gold-standard game have in mind is not clear. Of course, it is obvious that the gold standard cannot function satisfactorily if to buy or to sell or to hold gold is illegal, and hosts of judges, constables, and informers are busily enforcing the law. But the gold standard is not a game; it is a market phenomenon and as such a social institution. Its preservation does not depend on the observation of some specific rules. It requires nothing else than that the government abstain from deliberately sabotaging it. To refer to this condition as a rule of an alleged game is no more reasonable than to declare that the pres ervation of Paul's life depends on compliance with the rules of the Paul's-life game because Paul must die if somebody stabs him to death.

IV.21.26

What all the enemies of the gold standard spurn as its main vice is precisely the same thing that in the eyes of the advocates of the gold standard is its main virtue, namely, its incompatibility with a policy of credit expansion. The nucleus of all the effusions of the antigold authors and politicians is the expansionist fallacy.

IV.21.27

The expansionist doctrine does not realize that interest, that is, the discount of future goods as against present goods, is an originary category of human valuation, actual in any kind of human action and independent of any social institutions. The expansionists do not grasp the fact that there never were and there never can be human beings who attach to an apple available in a year or in a hundred years the same value they attach to an apple available now. In their opinion interest is an impediment to the expansion of production and consequently to human welfare that unjustified institutions have created in order to favor the selfish concerns of money lenders. Interest, they say, is the price people must pay for borrowing. Its height therefore depends on the magnitude of the supply of money. If laws did not artificially restrict the creation of additional money, the rate of interest would drop, ultimately even to zero. The "contractionist" pressure would disappear, there would no longer be a shortage of capital, and it would become possible to execute many business projects which the "restrictionism" of the gold standard obstructs. What is needed to make everyone prosperous is simply to defy "the rules of the gold-standard game," the observance of which is the main source of all our economic ills.

IV.21.28

These absurd doctrines greatly impressed ignorant politicians and demagogues when they were blended with nationalist slogans. What prevents our country from fully enjoying the advantages of a low-interest-rate policy, says the economic isolationist, is its adherence to the gold standard. Our central bank is forced to keep its rate of discount at a height that corresponds to conditions on the international money market and to the discount rates of foreign central banks. Otherwise "speculators" would withdraw funds from our country for short-term investment abroad and the resulting outflow of gold would make the gold reserves of our central bank drop below the legal ratio. If our central bank were not obliged to redeem its banknotes in gold, no such withdrawal of gold could occur and there would be no necessity for it to adjust the height of the money rate to the situation of the international money market, dominated by the world-embracing gold monopoly.

IV.21.29

The most amazing fact about this argument is that it was raised precisely in debtor countries for which the operation of the international money and capital market meant an inflow of foreign funds and consequently the appearance of a tendency toward a drop in interest rates. It was popular in Germany and still more in Austria in the 1870s and 80s, but it was hardly ever seriously mentioned in those years in England or in the Netherlands, whose banks and bankers lent amply to Germany and Austria. It was advanced in England only after World War I, when Great Britain's position as the world's banking center had been lost.

IV.21.30
Of course, the argument itself is untenable. The inevitable eventual failure of any attempt at credit expansion is not caused by the international intertwinement of the lending business. It is the outcome of the fact that it is impossible to substitute fiat money and a bank's circulation credit for nonexisting capital goods. Credit expansion initially can produce a boom. But such a boom is bound to end in a slump, in a depression. What bring about the recurrence of periods of economic crises are precisely the reiterated attempts of governments and banks supervised by them to expand credit in order to make business good by cheap interest rates.*7

IV.21.31

3 The Full-Employment Doctrine

The inflationist or expansionist doctrine is presented in several varieties. But its essential content remains always the same.

IV.21.32
The oldest and most naive version is that of the allegedly insufficient supply of money. Business is bad, says the grocer, because my customers or prospective customers do not have enough money to expand their purchases. So far he is right. But when he adds that what is needed to render his business more prosperous is to increase the quantity of money in circulation, he is mistaken. What he really has in mind is an increase of the amount of money in the pockets of his customers and prospective customers while the amount of money in the hands of other people remains unchanged. He asks for a specific kind of inflation; namely, an inflation in which the additional new money first flows into the cash holdings of a definite group of people, his customers, and thus permits him to reap inflation gains. Of course, everybody who advocates inflation does it because he infers that he will belong to those who are favored by the fact that the prices of the commodities and services they sell will rise at an earlier date and to a higher point than the prices of those commodities and services they buy. Nobody advocates an inflation in which he would be on the losing side.

IV.21.33
This spurious grocer philosophy was once and for all exploded by Adam Smith and Jean-Baptiste Say. In our day it has been revived by Lord Keynes, and under the name of full-employment policy is one of the basic policies of all governments which are not entirely subject to the Soviets. Yet Keynes was at a loss to advance a tenable argument against Say's law. Nor have his disciples or the hosts of economists, pseudo and other, in the offices of the various governments, the United Nations, and divers other national or international bureaus done any better. The fallacies implied in the Keynesian full-employment doctrine are, in a new attire, essentially the same errors which Smith and Say long since demolished.

IV.21.34
Wage rates are a market phenomenon, are the prices paid for a definite quantity of labor of a definite quality. If a man cannot sell his labor at the price he would like to get for it, he must lower the price he is asking for it or else he remains unemployed. If the government or labor unions fix wage rates at a higher point than the potential rate of the unhampered labor market and if they enforce their minimum-price decree by compulsion and coercion, a part of those who want to find jobs remain unemployed. Such institutional unemployment is the inevitable result of the methods applied by present-day self-styled progressive governments. It is the real outcome of measures falsely labeled prolabor. There is only one efficacious way toward a rise in real wage rates and an improvement of the standard of living of the wage earners: to increase the per-head quota of capital invested. This is what laissez-faire capitalism brings about to the extent that its operation is not sabotaged by government and labor unions.

IV.21.35
We do not need to investigate whether the politicians of our age are aware of these facts. In most universities it is not good form to mention them to the students. Books that are skeptical with regard to the official doctrines are not widely bought by the libraries or used in courses, and consequently publishers are afraid to publish them. Newspapers seldom criticize the popular creed because they fear a boycott on the part of the unions. Thus politicians may be utterly sincere in believing that they have won "social gains" for the "people" and that the

spread of unemployment is one of the evils inherent in capitalism and is in no way caused by the policies of which they are boasting. However this may be, it is obvious that the reputation and the prestige of the men who are now ruling the countries outside the Soviet bloc and of their professorial and journalistic allies are so inseparably tied up with the "progressive" doctrine that they must cling to it. If they do not want to forsake their political ambitions, they must stubbornly deny that their own policy tends to make mass unemployment a permanent phenomenon and must try to put on capitalism the blame for the undesired effects of their procedures.

IV.21.36
The most characteristic feature of the full-employment doctrine is that it does not provide information about the way in which wage rates are determined on the market. To discuss the height of wage rates is taboo for the "progressives." When they deal with unemployment, they do not refer to wage rates. As they see it, the height of wage rates has nothing to do with unemployment and must never be mentioned in connection with it.

IV.21.37
If there are unemployed, says the progressive doctrine, the government must increase the amount of money in circulation until full employment is reached. It is, they say, a serious mistake to call inflation an increase in the quantity of money in circulation effected under these conditions. It is just "full-employment policy."

IV.21.38
We may refrain from frowning upon this terminological oddity of the doctrine. The main point is that every increase in the quantity of money in circulation brings about a tendency of prices and wages to rise. If, in spite of the rise of commodity prices, wage rates do not rise at all or if their rise lags sufficiently behind the rise in commodity prices, the number of people unemployed on account of the height of wage rates will drop. But it will drop merely because such a configuration of commodity prices and wage rates means a drop in real wage rates. In order to attain this result it would not have been necessary to embark upon increasing the amount of money in circulation. A reduction in the height of the minimum-wage rates enforced by the government or union pressure would have achieved the same effect without at the same time starting all the other consequences of an inflation.

IV.21.39
It is a fact that in some countries in the 1930s, recourse to inflation was not immediately followed by a rise in the height of money wage rates as fixed by the governments or unions, that this was tantamount to a drop in real wage rates, and that consequently the number of unemployed decreased. But this was merely a passing phenomenon. When in 1936 Lord Keynes declared that a movement of employers to revise money-wage bargains downward would be much more strongly resisted than a gradual and "automatic" lowering of real wage rates as a result of rising prices,*8 he had already been outdated and refuted by the march of events. The masses had already begun to see through the artifices of inflation. Problems of purchasing power and index numbers became an important issue in the unions' dealings with wage rates. The full-employment argument in favor of inflation was already behind the times at the very moment when Keynes and his followers proclaimed it as the fundamental principle of progressive economic policies.

IV.21.40

4 The Emergency Argument in Favor of Inflation

All the economic arguments in favor of inflation are untenable. The fallacies have long since been exploded in an irrefutable way.

IV.21.41
There is, however, a political argument in favor of inflation that requires special analysis. This political argument is only rarely resorted to in books, articles, and political speeches. It does not lend itself to such public treatment. But the underlying idea plays an important role in the thinking of statesmen and historians.

IV.21.42
Its supporters fully accept all the teachings of the sound-money doctrine. They do not share the errors of the inflationist quacks. They realize that inflationism is a self-defeating policy

which must inevitably lead to an economic cataclysm and that all its allegedly beneficial effects are, even from the point of view of the authors of the inflationary policy, more undesirable than the evils which were to be cured by inflation. In full awareness of all this, however, they still believe that there are emergencies which peremptorily require or at least justify recourse to inflation. A nation, they say, can be menaced by evils which are incomparably more disastrous than the effects of inflation. If it is possible to avoid the total annihilation of a nation's freedom and culture by a temporary abandonment of sound money, no reasonable objection can be raised against such a procedure. It would simply mean preferring a smaller evil to a greater one.

IV.21.43

In order to appraise correctly the weight of this emergency argument in favor of inflation, there is need to realize that inflation does not add anything to a nation's power of resistance, either to its material resources or to its spiritual and moral strength. Whether there is inflation or not, the material equipment required by the armed forces must be provided out of the available means by restricting consumption for nonvital purposes, by intensifying production in order to increase output, and by consuming a part of the capital previously accumulated. All these things can be done if the majority of citizens are firmly resolved to offer resistance to the best of their abilities and are prepared to make such sacrifices for the sake of preserving their independence and culture. Then the legislature will adopt fiscal methods which warrant the achievement of these goals. They will attain what is called economic mobilization or a defense economy without tampering with the monetary system. The great emergency can be dealt with without recourse to inflation.

IV.21.44

But the situation those advocating emergency inflation have in mind is of a quite different character. Its characteristic feature is an irreconcilable antagonism between the opinions of the government and those of the majority of the people. The government, in this regard supported by only a minority of the people, believes that there exists an emergency that necessitates a considerable increase in public expenditure and a corresponding austerity in private households. But the majority of the people disagree. They do not believe that conditions are so bad as the government depicts them or they think that the preservation of the values endangered is not worth the sacrifices they would have to make. There is no need to raise the question whether the government's or the majority's opinion is right. Perhaps the government is right. However, we deal not with the substance of the conflict but with the methods chosen by the rulers for its solution. They reject the democratic way of persuading the majority. They arrogate to themselves the power and the moral right to circumvent the will of the people. They are eager to win its cooperation by deceiving the public about the costs involved in the measures suggested. While seemingly complying with the constitutional procedures of representative government, their conduct is in effect not that of elected officeholders but that of guardians of the people. The elected executive no longer deems himself the people's mandatory; he turns into a führer.

IV.21.45

The emergency that brings about inflation is this: the people or the majority of the people are not prepared to defray the costs incurred by their rulers' policies. They support these policies only to the extent that they believe their conduct does not burden themselves. They vote, for instance, only for such taxes as are to be paid by other people, namely, the rich, because they think that these taxes do not impair their own material well-being. The reaction of the government to this attitude of the nation is, at least sometimes, directed by the sincere wish to serve what it believes to be the true interests of the people in the best possible way. But if the government resorts for this purpose to inflation, it is employing methods which are contrary to the principles of representative government, although formally it may have fully complied with the letter of the constitution. It is taking advantage of the masses' ignorance, it is cheating the voters instead of trying to convince them.

IV.21.46

It is not just an accident that in our age inflation has become the accepted method of monetary management. Inflation is the fiscal complement of statism and arbitrary government. It is a cog in the complex of policies and institutions which gradually lead toward totalitarianism.

IV.21.47

Western liberty cannot hold its ground against the onslaughts of Oriental slavery if the peoples do not realize what is at stake and are not ready to make the greatest sacrifices for the ideals of their civilization. Recourse to inflation may provide the government with the funds which it could neither collect by taxation nor borrow from the savings of the public because the people and its parliamentary representatives objected. Spending the newly created fiat money, the government can buy the equipment the armed forces need. But a nation reluctant to make the material sacrifices necessary for victory will never display the requisite mental energy. What warrants success in a fight for freedom and civilization is not merely material equipment but first of all the spirit that animates those handling the weapons. This heroic spirit cannot be bought by inflation.

IV.21.48

CHAPTER 22
Contemporary Currency Systems

1 The Inflexible Gold Standard

The mark of all the varieties of the gold standard and the gold-exchange standard as they existed on the eve of World War I was the gold parity of the country's monetary unit, precisely determined by a duly promulgated law. It was understood that this parity would never be changed. In virtue of the parity law the unit of the national currency system was practically a definite quantity of the metal gold. It was of no consequence whether or not banknotes had been endowed with legal-tender power. They were redeemable in gold, and the central banks really did redeem them fully on demand.

IV.22.1

The difference between the standard that was later called the orthodox or the classical gold standard and the gold-exchange standard was a difference of degree. Under the former there were gold coins in the cash holdings of the individual citizens and firms and they were—together with banknotes, checks, and fractional coins—employed in business transactions. Under the gold-exchange standard no gold was used in transacting domestic business. But the central bank sold gold bullion and foreign exchange against domestic currency at rates that did not exceed the legal parity by more than the gold margin would be under the classical gold standard. Thus the countries under the gold-exchange standard were no less integrated into the system of the international gold standard than those under the classical gold standard.

IV.22.2

2 The Flexible Standard

The flexible standard, a development of the period between World War I and World War II, originated from the gold-exchange standard. Its characteristic features are:

1. The domestic standard's parity as against gold and foreign exchange is not fixed by a law but simply by the government agency entrusted with the conduct of monetary affairs.
2. This parity is subject to sudden changes without previous notice to the public. It is flexible. But this flexibility is practically always employed for lowering the domestic currency's exchange value as against gold and those foreign currencies which did not drop against gold. If the downward jump of parity was rather conspicuous, it was called a devaluation. If it was slight only, it was usual to speak of a newly manifested weakness of the currency concerned.
3. The only method available for preventing a currency's exchange value from dropping below the parity chosen is unconditional redemption of any amount offered. But the term redemption has in the ears of the self-styled unorthodox statesman an unpleasant connotation. It reminds him of the past when the holder of a banknote had a legally warranted right to redemption at par. The modern bureaucrat prefers the term pegging. In fact, in this connection pegging and redeeming mean exactly the same thing. They mean that the currency concerned is prevented from dropping below a certain point by the fact that any amount offered for sale is bought at this price by the redeeming or pegging agency.

IV.22.3
Of course, this point—the parity—is not fixed by a law under the flexible standard, and the agency is free to decline to buy an amount offered at this rate. Then the price of foreign exchange begins to rise as against this parity. If the government does not intend to adopt the freely vacillating standard, the pegging is soon resumed at a lower level, that is, the price of foreign exchange is now higher in terms of the domestic currency. Such an event is sometimes referred to as raising the price of gold.

4. In some countries the conduct of pegging operations is entrusted to the central bank, in others to a special agency called foreign-exchange equalization account or a similar name.*9

IV.22.4

3 The Freely Vacillating Currency

If the government practices restraint in the issuance of additional amounts of its credit or fiat money and if public opinion assumes that the inflationary policy will be stopped altogether in a not too distant future, an inflationary currency system can prevail for a series of years. The country experiences all the effects resulting from a currency the unit of which vacillates in exchange value as against the international gold standard. With regard to these effects the freely vacillating currency may be called a bad currency. But it can last and is not inevitably headed for a breakdown.

IV.22.5
The characteristic mark of this freely vacillating currency is that the owner of any amount of it has no claim whatever against the Treasury, a bank, or any other agency. There is no redemption either de jure or de facto. The pieces are not money substitutes but money proper in themselves.

IV.22.6
It sometimes happened, especially in the European inflations of the 1920s, that the government, frightened by a speedy decline in its currency's price in terms of gold or foreign exchange, tried to counteract the decline by selling on the market a certain amount of gold and foreign exchange against domestic currency. It was a rather nonsensical operation. It would have been much simpler and much more effective if the government had never issued those amounts which it later bought back on the market. Such ventures did not affect the course of events. The only reason they must be mentioned is that governments and their agents sometimes falsely referred to them as pegging.

IV.22.7
The outstanding instance of a freely vacillating currency today is the United States dollar, the New Deal dollar. It is not redeemable in gold or any foreign exchange. The administration is committed to an inflationary policy, increasing more and more the amount of notes in circulation and of bank deposits subject to check. If the Treasury had been permitted to act according to the designs of its advisers, the dollar would have long since gone the way of the German mark of 1923. But lively protests on the part of a few economists alarmed the nation and enjoined restraint on the Treasury. The speed of the inflation was slowed down. Yet the future of the dollar is precarious, dependent on the vicissitudes of the continuing struggle between a small minority of economists on the one hand and hosts of ignorant demagogues and their "unorthodox" allies on the other hand.

IV.22.8

4 The Illusive Standard

The illusive standard is based on a falsehood. The government decrees that there exists a parity between the domestic currency and gold or foreign exchange. It is fully aware of the fact that on the market there prevail exchange ratios lower than the illusory parity it is pleased to ordain. It knows that nothing is done to make the illusory parity an effective parity. It knows that there is no convertibility. But it clings to its pretense and forbids transactions at a ratio deviating from its fictitious exchange rate. He who sells or buys at any other ratio is guilty of a crime and severely punished.

IV.22.9

Strict enforcement of such a decree would make all monetary transactions with foreign countries cease. Therefore the government goes a step further. It expropriates all foreign exchange owned by its subjects and indemnifies the expropriated by paying them the amount of domestic currency which according to the official decree is the equivalent of the confiscated foreign-exchange holdings. These confiscations convey to the government the national monopoly of dealing with foreign exchange. It is now the only seller of foreign exchange in the country. In compliance with its own decree it should sell foreign exchange at the official rate.

IV.22.10

On the market not hampered by government interference there prevails a tendency to establish and to maintain such an exchange ratio between the domestic currency (A) and foreign exchange (B) that it does not make any difference whether one buys or sells merchandise against A or against B. As long as it is possible to make a profit buying a definite commodity against B and selling it against A, there will be a specific demand for amounts of B originating from merchants selling amounts of A. This specific demand will cease only when no further profits can be reaped on account of price discrepancies between prices expressed in terms of each of these two currencies. The market rate is maintained by the fact that there is no longer an advantage for anybody in paying a higher price for foreign exchange. Buying either of A against B or of B against A at a higher price (expressed in the first case in terms of B and in the second in terms of A) than the market price would not bring specific profits. Arbitrage operations tend to cease at this price. This is the process that the purchasing-power-parity theory of foreign exchange describes.

IV.22.11

The policy pretentiously called foreign-exchange control tries to counteract the operation of the purchasing-power-parity principle and fails lamentably. Confiscating foreign exchange against an indemnity below its market price is tantamount to an export duty. It tends to lower exports and thus the amount of foreign exchange that the government can seize. On the other hand, selling foreign exchange below its market price is tantamount to subsidizing imports and thereby to increasing the demand for foreign exchange. The illusive standard and its main tool, foreign-exchange control, result in a state of affairs which is—rather inappropriately—called shortage of foreign exchange.

IV.22.12

Scarcity is the essential feature of an economic good. Goods which are not scarce in relation to the demand for them are not economic goods but free goods. Human action is not concerned with them, and economics does not deal with them. No prices are paid for such free goods and nothing can be obtained in exchange for them. To establish the fact that gold or dollars are in short supply is to pronounce a truism.

IV.22.13

The state of affairs which those talking of a scarcity of dollars want to describe is this: At the fictitious parity, arbitrarily fixed by the government and enforced by the whole governmental apparatus of oppression and compulsion, demand for dollars exceeds the supply of dollars offered for sale. This is the inescapable consequence of every attempt on the part of a government or other agency to enforce a maximum price below the height at which the unhampered market would have determined the market price.

IV.22.14

The Ruritanians would like to consume more foreign goods than they can buy by exporting Ruritanian products. It is a rather clumsy way of describing this situation to declare that the Ruritanians suffer from a shortage of foreign exchange. Their plight is brought about by the fact that they are not producing more and better things either for domestic or for foreign consumption. If the dollar buys at the free market 100 Ruritanian rurs and the government fixes a fictitious parity of 50 rurs and tries to enforce it by foreign-exchange control, things become worse. Ruritanian exports drop and the demand for foreign goods increases.

IV.22.15

Of course, the Ruritanian government will then resort to various measures allegedly devised to "improve" the balance of payments. But no matter what is tried, the "scarcity" of dollars does not disappear.

IV.22.16
Foreign-exchange control is today primarily a device for the virtual expropriation of foreign investments. It has destroyed the international capital and money market. It is the main instrument of policies aiming at the elimination of imports and thereby at the economic isolation of the various countries. It is thus one of the most important factors in the decline of Western civilization. Future historians will have to deal with it circumstantially. In referring to the actual monetary problems of our day it is enough to stress the point that it is an abortive policy.

IV.22.17

CHAPTER 23
The Return to Sound Money

1 Monetary Policy and the Present Trend Toward All-round Planning

The people of all countries agree that the present state of monetary affairs is unsatisfactory and that a change is highly desirable. However, ideas about the kind of reform needed and about the goal to be aimed at differ widely. There is some confused talk about stability and about a standard which is neither inflationary nor deflationary. The vagueness of the terms employed obscures the fact that people are still committed to the spurious and self-contradictory doctrines whose very application has created the present monetary chaos.

IV.23.1
The destruction of the monetary order was the result of deliberate actions on the part of various governments. The government-controlled central banks and, in the United States, the government-controlled Federal Reserve System were the instruments applied in this process of disorganization and demolition. Yet without exception all drafts for an improvement of currency systems assign to the governments unrestricted supremacy in matters of currency and design fantastic images of superprivileged superbanks. Even the manifest futility of the International Monetary Fund does not deter authors from indulging in dreams about a world bank fertilizing mankind with floods of cheap credit.

IV.23.2
The inanity of all these plans is not accidental. It is the logical outcome of the social philosophy of their authors.

IV.23.3
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 ownership of the means of production and the division of labor. This mode of economic organization—the market economy or capitalism—is at present unanimously condemned by governments and political parties. Educational institutions, from universities down to kindergartens, the press, the radio, the legitimate theater as well as the screen, and publishing firms are almost completely dominated by people in whose opinion capitalism appears as the most ghastly of all evils. The goal of their 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 the authorities, enforced by the police power. It implies the nullification of each citizen's right to plan his own life. It converts the individual citizens into mere pawns in the schemes of the planning board, whether it is called Politburo, Reichswirtschaftsministerium, or some other name. Planning does not differ from the social system that Marx advocated under the names of socialism and communism. It transfers control of all production activities to the government and thus eliminates the market altogether. Where there is no market, there is no money either.

IV.23.4
Although the present trend of economic policies leads toward socialism, the United States and some other countries have still preserved the characteristic features of the market economy. Up to now the champions of government control of business have not yet succeeded in attaining their ultimate goal.

IV.23.5
The Fair Deal party has maintained that it is the duty of the government to determine what prices, wage rates, and profits are fair and what not, and then to enforce its rulings by the police power and the courts. It further maintains that it is a function of the government to keep the rate of interest at a fair level by means of credit expansion. Finally, it urges a system of taxation that aims at the equalization of incomes and wealth. Full application of either the first or the last of these principles would by itself consummate the establishment of socialism. But things have not yet moved so far in this country. The resistance of the advocates of economic freedom has not yet been broken entirely. There is still an opposition that has prevented the permanent establishment of direct control of all prices and wages and the total confiscation of all incomes above a height deemed fair by those whose income is lower. In the countries on this side of the Iron Curtain the battle between the friends and the foes of totalitarian all-round planning is still undecided.

IV.23.6
In this great conflict the advocates of public control cannot do without inflation. They need it in order to finance their policy of reckless spending and of lavishly subsidizing and bribing the voters. The undesirable but inevitable consequence of inflation, the rise in prices, provides them with a welcome pretext to establish price control and thus step by step to realize their scheme of all-round planning. The illusory profits which the inflationary falsification of economic calculation makes appear are dealt with as if they were real profits; in taxing them away under the misleading label of excess profits, parts of the capital invested are confiscated. In spreading discontent and social unrest, inflation generates favorable conditions for the subversive propaganda of the self-styled champions of welfare and progress. The spectacle that the political scene of the last two decades has offered has been really amazing. Governments without any hesitation have embarked upon vast inflation and government economists have proclaimed deficit spending and "expansionist" monetary and credit management as the surest way toward prosperity, steady progress, and economic improvement. But the same governments and their henchmen have indicted business for the inevitable consequences of inflation. While advocating high prices and wage rates as a panacea and praising the administration for having raised the "national income" (of course, expressed in terms of a depreciating currency) to an unprecedented height, they blamed private enterprise for charging outrageous prices and profiteering. While deliberately restricting the output of agricultural products in order to raise prices, statesmen have had the audacity to contend that capitalism creates scarcity and that but for the sinister machinations of big business there would be plenty of everything. And millions of voters have swallowed all this.

IV.23.7
There is need to realize that the economic policies of self-styled progressives cannot do without inflation. They cannot and never will accept a policy of sound money. They can abandon neither their policies of deficit spending nor the help their anticapitalist propaganda receives from the inevitable consequences of inflation. It is true they talk about the necessity of doing away with inflation. But what they mean is not to end the policy of increasing the quantity of money in circulation but to establish price control, that is, futile schemes to escape the emergency arising inevitably from their policies.

IV.23.8
Monetary reconstruction, including the abandonment of inflation and the return to sound money, is not merely a problem of financial technique that can be solved without change in the structure of general economic policies. There cannot be stable money within an environment dominated by ideologies hostile to the preservation of economic freedom. Bent on disintegrating the market economy, the ruling parties will certainly not consent to reforms that would deprive them of their most formidable weapon, inflation. Monetary reconstruction presupposes first of all total and unconditional rejection of those allegedly progressive policies which in the United States are designated by the slogans New Deal and Fair Deal.

IV.23.9

2 The Integral Gold Standard

Sound money still means today what it meant in the nineteenth century: the gold standard.

IV.23.10

The eminence of the gold standard consists in the fact that it makes the determination of the monetary unit's purchasing power independent of the measures of governments. It wrests from the hands of the "economic tsars" their most redoubtable instrument. It makes it impossible for them to inflate. This is why the gold standard is furiously attacked by all those who expect that they will be benefited by bounties from the seemingly inexhaustible government purse.

IV.23.11
What is needed first of all is to force the rulers to spend only what, by virtue of duly promulgated laws, they have collected as taxes. Whether governments should borrow from the public at all and, if so, to what extent are questions that are irrelevant to the treatment of monetary problems. The main thing is that the government should no longer be in a position to increase the quantity of money in circulation and the amount of checkbook money not fully—that is, 100 percent—covered by deposits paid in by the public. No backdoor must be left open where inflation can slip in. No emergency can justify a return to inflation. Inflation can provide neither the weapons a nation needs to defend its independence nor the capital goods required for any project. It does not cure unsatisfactory conditions. It merely helps the rulers whose policies brought about the catastrophe to exculpate themselves.

IV.23.12
One of the goals of the reform suggested is to explode and to kill forever the superstitious belief that governments and banks have the power to make the nation or individual citizens richer, out of nothing and without making anybody poorer. The shortsighted observer sees only the things the government has accomplished by spending the newly created money. He does not see the things the nonperformance of which provided the means for the government's success. He fails to realize that inflation does not create additional goods but merely shifts wealth and income from some groups of people to others. He neglects, moreover, to take notice of the secondary effects of inflation: malinvestment and decumulation of capital.

IV.23.13
Notwithstanding the passionate propaganda of the inflationists of all shades, the number of people who comprehend the necessity of entirely stopping inflation for the benefit of the public treasury is increasing. Keynesianism is losing face even at the universities. A few years ago governments proudly boasted of the "unorthodox" methods of deficit spending, pump-priming, and raising the "national income." They have not discarded these methods but they no longer brag about them. They even occasionally admit that it would not be such a bad thing to have balanced budgets and mon etary stability. The political chances for a return to sound money are still slim, but they are certainly better than they have been in any other period since 1914.

IV.23.14
Yet most of the supporters of sound money do not want to go beyond the elimination of inflation for fiscal purposes. They want to prevent any kind of government borrowing from banks issuing banknotes or crediting the borrower on an account subject to check. But they do not want to prevent in the same way credit expansion for the sake of lending to business. The reform they have in mind is by and large bringing back the state of affairs prevailing before the inflations of World War I. Their idea of sound money is that of the nineteenth-century economists with all the errors of the British Banking School that disfigured it. They still cling to the schemes whose application brought about the collapse of the European banking systems and currencies and discredited the market economy by generating the almost regular recurrence of periods of economic depression.

IV.23.15
There is no need to add anything to the treatment of these problems as provided in part three of this volume and also in my book Human Action. If one wants to avoid the recurrence of economic crises, one must avoid the expansion of credit that creates the boom and inevitably leads into the slump.

IV.23.16
Even if for the sake of argument we neglect to refer to these issues, one must realize that conditions are no longer such as the nineteenth-century champions of bank-credit expansion had in mind.

IV.23.17
These statesmen and authors regarded the government's financial needs as the main and practically the only threat to the privileged bank's or banks' solvency. Ample historical experience had proved that the government could and did force the banks to lend to them. Suspension of the banknotes' convertibility and legal-tender provisions had transformed the "hard" currencies of many countries into questionable paper money. The logical conclusion to be drawn from these facts would have been to do away with privileged banks altogether and to subject all banks to the rule of common law and the commercial codes that oblige everybody to perform contracts in full faithfulness to the pledged word. Free banking would have spared the world many crises and catastrophes. But the tragic error of nineteenth-century bank doctrine was the belief that lowering the rate of interest below the height it would have on an unhampered market is a blessing for a nation and that credit expansion is the right means for the attainment of this end. Thus arose the characteristic duplicity of the bank policy. The central bank or banks must not lend to the government but should be free, within certain limits, to expand credit to business. The idea was that in this way one could make the central banking function independent of the government.

IV.23.18
Such an arrangement presupposes that government and business are two distinct realms of the conduct of affairs. The government levies taxes but it does not interfere with the way the various enterprises operate. If the government meddles with central-bank affairs, its objective is to borrow for the treasury and not to induce the banks to lend more to business. In making bank loans to the government illegal, the bank's management is enabled to gauge its credit transactions in accordance with the needs of business only.

IV.23.19
Whatever the merits or demerits of this point of view may have been in older days,*10 it is obvious that it is no longer of any consequence. The main inflationary motive of our day is the so-called full-employment policy, not the treasury's incapacity to fill its empty vaults from sources other than bank loans. Monetary policy is regarded—wrongly, of course—as an instrument for keeping wage rates above the height they would have reached on an unhampered labor market. Credit expansion is subservient to the unions. If a hundred or seventy years ago the government of a Western nation had ventured to extort a loan from the central bank, the public would unanimously have sided with the bank and thwarted the plot. But for many years there has been little opposition to credit expansion for the sake of "creating jobs," that is, for providing business with the money needed for the payment of the wage rates which the unions, strongly aided by the government, force business to grant. Nobody took notice of warning voices when England in 1931 and the United States in 1933 entered upon the policy for which Lord Keynes, a few years later in his General Theory, tried to concoct a justification, and when in 1936 Blum, in imposing upon the French employers the so-called Matignon agreements, ordered the Bank of France to lend freely the sums business needed for complying with the dictates of the unions.

IV.23.20
Inflation and credit expansion are the means to obfuscate the fact that there prevails a nature-given scarcity of the material things on which the satisfaction of human wants depends. The main concern of capitalist private enterprise is to remove this scarcity as much as possible and to provide a continuously improving standard of living for an increasing population. The historian cannot help noting that laissez-faire and rugged individualism have to an unprecedented extent succeeded in their endeavors to supply the common man more and more amply with food, shelter, and many other amenities. But however remarkable these improvements may be, there will always be a strict limit to the amount that can be consumed without reducing the capital available for the continuation and, even more, the expansion of production.

IV.23.21
In older ages social reformers believed that all that was needed to improve the material conditions of the poorer strata of society was to confiscate the surplus of the rich and to distribute it among those having less. The falsehood of this formula, despite the fact that it is still the ideological principle guiding present-day taxation, is no longer contested by any reasonable man. One may neglect stressing the point that such a distribution can add only a negligible amount to the income of the immense majority. The main thing is that the total amount produced in a nation or in the whole world over a definite period of time is not a magnitude independent of the mode of society's economic organization. The threat of being

deprived by confiscation of a considerable or even the greater part of the yield of one's own activities slackens the individual's pursuit of wealth and thus results in a diminution of the national product. The Marxian socialists once indulged in reveries concerning a fabulous increase in riches to be expected from the socialist mode of production. The truth is that every infringement of property rights and every restriction of free enterprise impairs the productivity of labor. One of the foremost concerns of all parties hostile to economic freedom is to withhold this knowledge from the voters. The various brands of socialism and interventionism could not retain their popularity if people were to discover that the measures whose adoption is hailed as social progress curtail production and tend to bring about capital decumulation. To conceal these facts from the public is one of the services inflation renders to the so-called progressive policies. Inflation is the true opium of the people and it is administered to them by anticapitalist governments and parties.

IV.23.22

3 Currency Reform in Ruritania

When compared with conditions in the United States or in Switzerland, Ruritania appears a poor country. The average income of a Ruritanian is below the average income of an American or a Swiss.

IV.23.23

Once, in the past, Ruritania was on the gold standard. But the government issued little sheets of printed paper to which it assigned legal-tender power in the ratio of one paper rur to one gold rur. All residents of Ruritania were made to accept any amount of paper rurs as the equivalent of the same nominal amount of gold rurs. The government alone did not comply with the rule it had decreed. It did not convert paper rurs into gold rurs in accordance with the ratio 1 : 1. As it went on increasing the quantity of paper rurs, the effects resulted which Gresham's law describes. The gold rurs disappeared from the market. They were either hoarded by Ruritanians or sold abroad.

IV.23.24

Almost all the nations of the earth have behaved in the way the Ruritanian government did. But the rates of the inflationary increase of the quantities of their national fiat money have been different. Some nations were more moderate in issuing additional quantities, some less. The result is that the exchange ratios between the various nations' local fiat-money currencies are no longer the same ratios that prevailed between their currencies in the period before they went off the gold standard. In those old days five gold rurs were equal to one gold dollar. Although today's dollar is no longer the equivalent of the weight of gold it represented under the gold standard, that is, before 1933, 100 paper rurs are needed to buy one of these depreciated dollars. A short time ago eighty paper rurs could buy one dollar. If the present rates of inflation both in the United States and in Ruritania do not change, the paper rur will drop more and more in terms of dollars.

IV.23.25

The Ruritanian government knows very well that all it has to do in order to prevent a further depreciation of the paper rur as against the dollar is to slow down the deficit spending it finances by continued inflation. In fact, in order to maintain a stable exchange rate against the dollar, it would not be forced to abandon inflation altogether. It would only have to reduce it to a rate in due proportion to the extent of American inflation. But, government officials say, it is impossible for Ruritania, being a poor country, to balance its budget with a smaller amount of inflation than the present one. For such a reduction would enjoin upon it the necessity of undoing some of the results of social progress and of relapsing into the conditions of "social backwardness" of the United States. The government has nationalized railroads, telegraphs, and telephones and operates various plants, mines, and branches of industry as national enterprises. Every year the conduct of affairs of almost all the public undertakings produces a deficit that must be covered by taxes collected from the shrinking group of nonnationalized and nonmunicipalized businesses. Private business is a source of the treasury's revenue. Nationalized industry is a drain upon the government's funds. But these funds would be insufficient in Ruritania if not swelled by more and more inflation.

IV.23.26

From the point of view of monetary technique the stabilization of a national currency's exchange ratio as against foreign, less-inflated currencies or against gold is a simple matter.

The preliminary step is to abstain from any further increase in the quantity of domestic currency. This will at the outset stop the further rise in foreign-exchange rates and the price of gold. After some oscillations a somewhat stable exchange rate will appear, the height of which depends on the purchasing-power parity. At this rate it no longer makes any difference whether one buys or sells against currency A or currency B.

IV.23.27

But this stability cannot last indefinitely. While an increase in the production of gold or an increase in the issuance of dollars continues abroad, Ruritania now has a currency the quantity of which is rigidly limited. Under these conditions there can no longer prevail full correspondence between the movements of commodity prices on the Ruritanian markets and those on foreign markets. If prices in terms of gold or dollars are rising, those in terms of rurs will lag behind them or even drop. This means that the purchasing-power parity is changing. A tendency will emerge toward an enhancement of the price of the rur as expressed in gold or dollars. When this trend becomes manifest, the propitious moment for the completion of the monetary reform has arrived. The exchange rate that prevails on the market at this juncture is to be promulgated as the new legal parity between the rur and either gold or the dollar. Unconditional convertibility at this legal rate of every paper rur against gold or dollars and vice versa is henceforward to be the fundamental principle.

IV.23.28

The reform thus consists of two measures. The first is to end inflation by setting an insurmountable barrier to any further increase in the supply of domestic money. The second is to prevent the relative deflation that the first measure will, after a certain time, bring about in terms of other currencies the supply of which is not rigidly limited in the same way. As soon as the second step has been taken, any amount of rurs can be converted into gold or dollars without any delay and any amount of gold or dollars into rurs. The agency, whatever its appellation may be, that the reform law entrusts with the performance of these exchange operations needs for technical reasons a certain small reserve of gold or dollars. But its main concern is, at least in the initial stage of its functioning, how to provide the rurs necessary for the exchange of gold or foreign currency against rurs. To enable the agency to perform this task, it has to be entitled to issue additional rurs against a full—100 percent—coverage by gold or foreign exchange bought from the public.

IV.23.29

It is politically expedient not to charge this agency with any responsibilities and duties other than those of buying and selling gold or foreign exchange according to the legal parity. Its task is to make this legal parity an effective real market rate, preventing, by unconditional redemption of rurs, a drop of their market price against legal parity, and, by unconditional buying of gold or foreign exchange, an enhancement of the price of rurs as against legal parity.

IV.23.30

At the very start of its operations the agency needs, as has been mentioned, a certain reserve of gold or foreign exchange. This reserve has to be lent to it either by the government or by the central bank, free of interest and never to be recalled. No business other than this preliminary loan must be negotiated between the govern ment and any bank or institution dependent on the government on the one hand and the agency on the other hand.*11 The total amount of rurs issued before the start of the new monetary regime must not be increased by any operations on the part of the government; only the agency is free to issue additional new rurs, rigidly complying in such issuance with the rule that each of these new rurs must be fully covered by gold or foreign exchange paid in by the public in exchange for them.

IV.23.31

The government's mint may go on to coin and to issue as many fractional or subsidiary coins as seem to be needed by the public. In order to prevent the government from misusing its monopoly of mintage for inflationary ventures and flooding the market, under the pretext of catering to peoples' demand for "change," with huge quantities of such tokens, two provisions are imperative. To these fractional coins only a strictly limited legal-tender power should be given for payments to any payee but the government. Against the government alone they should have unlimited legal-tender power, and the government, moreover, must be obliged to redeem in rurs, without any delay and without any cost to the bearer, any amount presented, either by any private individual, firm, or corporation or by the agency.

Unlimited legal-tender power must be reserved to the various denominations of banknotes of one rur and upward, issued either before the reform or, if after the reform, against full coverage in gold or foreign exchange.

IV.23.32
Apart from this exchange of fractional coins against legal-tender rurs the agency deals exclusively with the public and not with the government or any of the institutions dependent on it, especially not with the central bank. The agency serves the public and deals exclusively with that part of the public that wants to avail itself, of its own free accord, of the agency's services. But no privileges are accorded to the agency. It does not get a monopoly for dealing in gold or foreign exchange. The market is perfectly free from any restriction. Everybody is free to buy or sell gold or foreign exchange. There is no centralization of such transactions. Nobody is forced to sell gold or foreign exchange to the agency or to buy gold or foreign exchange from it.

IV.23.33
When these measures are once achieved, Ruritania is either on the gold-exchange standard or on the dollar-exchange standard. It has stabilized its currency as against gold or the dollar. This is enough for the beginning. There is no need for the moment to go further. No longer threatened by a breakdown of its currency, the nation can calmly wait to see how monetary affairs in other countries will develop.

IV.23.34
The reform suggested would deprive the government of Ruritania of the power to spend any rur above the sums collected by taxing the citizens or by borrowing from the public, whether domestic or foreign. Once this is achieved, the specter of an unfavorable balance of payment fades away. If Ruritanians want to buy foreign products, they must export domestic products. If they do not export, they cannot import.

IV.23.35
But, says the inflationist, what about the flight of capital? Will not unpatriotic citizens of Ruritania and foreigners who have invested capital within the country try to transfer their capital to other countries offering better prospects for business?

IV.23.36
John Badman, a Ruritanian, and Paul Yank, an American, have invested in Ruritania in the past. Badman owns a mine, Yank a factory. Now they realize that their investments are unsafe. The Ruritanian government is committed to a policy that confiscates not only all the yields of their investments but step by step the substance too. Badman and Yank want to salvage what still can be salvaged; they want to sell against rurs and to transfer the proceeds by buying dollars and exporting them. But their problem is to find a buyer. If all those who have the funds needed for such a purchase think like them, it will be absolutely impossible to sell even at the lowest price. Badman and Yank have missed the right moment. Now it is too late.

IV.23.37
But perhaps there are buyers. Bill Sucker, an American, and Peter Simple, a Ruritanian, believe that the prospects of the investments concerned are more propitious than Badman and Yank assume. Sucker has dollars ready; he buys rurs and against these rurs Yank's factory. Yank buys the dollars Sucker has sold to the agency. Simple has saved rurs and invests his savings in purchasing Badman's mine. It would have been possible for him to employ his savings in a different way, to buy producers' or consumers' goods in Ruritania. The fact that he does not buy these goods brings about a drop in their prices or prevents a rise which would have occurred if he had bought them. It disarranges the price structure on the domestic market in such a way as to make exports possible that could not be effected before or to prevent imports which were effected before. Thus it produces the amount of dollars which Badman buys and sends abroad.

IV.23.38
A specter that worries many advocates of foreign-exchange control is the assumption that the Ruritanians engaged in export trade could leave the foreign-exchange proceeds of their business abroad and thus deprive their country of a part of its foreign exchange.

IV.23.39
Miller is such an exporter He buys commodity A in Ruritania and sells it abroad. Now he chooses to go out of business and to transfer all his assets to a foreign country. But this does not stop Ruritania's exporting A. As according to our assumption there can be profits earned by buying A in Ruritania and selling it abroad, the trade will go on. If no Ruritanian has the funds needed for engaging in it, foreigners will fill the gap. For there are always people in markets not entirely destroyed by government sabotage who are eager to take advantage of any opportunity to earn profits.

IV.23.40
Let us emphasize this point again: If people want to consume what other people have produced, they must pay for it by giving the sellers something they themselves have produced or by rendering them some services. This is true in the relation between the people of the state of New York and those of Iowa no less than in the relation between the people of Ruritania and those of Laputania. The balance of payments always balances. For if the Ruritanians (or New Yorkers) do not pay, the Laputanians (or Iowans) will not sell.

IV.23.41

4 The United States' Return to a Sound Currency

With Washington politicians and Wall Street pundits the problem of a return to the gold standard is taboo. Only imbecile or ignorant people, say the professorial and journalistic apologists of inflation, can nurture such an absurd idea.

IV.23.42
These gentlemen would be perfectly right if they were merely to assert that the gold standard is incompatible with the methods of deficit spending. One of the main aims of a return to gold is precisely to do away with this system of waste, corruption, and arbitrary government. But they are mistaken if they would have us believe that the reestablishment and preservation of the gold standard is Economically and technically impossible.

IV.23.43
The first step must be a radical and unconditional abandonment of any further inflation. The total amount of dollar bills, whatever their name or legal characteristic may be, must not be increased by further issuance. No bank must be permitted to expand the total amount of its deposits subject to check or the balance of such deposits of any individual customer, be he a private citizen or the U.S. Treasury, otherwise than by receiving cash deposits in legal-tender banknotes from the public or by receiving a check payable by another domestic bank subject to the same limitations. This means a rigid 100 percent reserve for all future deposits; that is, all deposits not already in existence on the first day of the reform.

IV.23.44
At the same time all restrictions on trading and holding gold must be repealed. The free market for gold is to be reestablished. Everybody, whether a resident of the United States or of any foreign country, will be free to buy and to sell, to lend and to borrow, to import and to export, and, of course, to hold any amount of gold, whether minted or not minted, in any part of the nation's territory as well as in foreign countries.

IV.23.45
It is to be expected that this freedom of the gold market will result in the inflow of a considerable quantity of gold from abroad. Private citizens will probably invest a part of their cash holdings in gold. In some foreign countries the sellers of this gold exported to the United States may hoard the dollar bills received and leave the balances with American banks untouched. But many or most of these sellers of gold will probably buy American products.

IV.23.46
In this first period of the reform 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.

IV.23.47
The unconditional prohibition of the further issuance of any piece of paper to which legal-tender power is granted refers also to the issuance of the type of bills called silver certificates. The constitutional prerogative of Congress to decree that the United States is bound to buy definite quantities of a definite commodity, whether silver or potatoes or something else, at a definite price exceeding the market price and to store or to dump the quantities purchased must not be infringed. But such purchases are henceforth to be paid out of funds collected by taxing the people or by borrowing from the public.

IV.23.48
It is probable that the price of gold established after some oscillations on the American market will be higher than $35 per ounce, the rate of the Gold Reserve Act of 1934. It may be somewhere between $36 and $38, perhaps even somewhat higher. 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.

IV.23.49
A new agency is to be established, the Conversion Agency. The United States government lends to it a certain amount, let us say one billion dollars, in gold bullion (computed at the new parity), free of interest and never to be recalled. The Conversion Agency has two functions only: First, to sell gold bullion at the parity price to the public against dollars without any restriction. After a short time, when the mint will have coined a sufficient quantity of new American gold coins, the Conversion Agency will be obliged to hand out such gold pieces against paper dollars and checks drawn upon a solvent American bank. Second, to buy, against dollar bills at the legal parity, any amount of gold offered to it. To enable the Conversion Agency to execute this second task it is to be entitled to issue dollar bills against a 100 percent reserve in gold.

IV.23.50
The Treasury is bound to sell gold—bullion or new American coins—to the Conversion Agency at legal parity against any kind of American legal-tender bills issued before the start of the reform, against American token coins, or against checks drawn upon a member bank. To the extent that such sales reduce the government's gold holdings, the total amount of all varieties of legal-tender paper sheets, issued before the start of the reform, and of member-bank deposits subject to check is to be reduced. How this reduction is to be distributed among the various classes of these types of currency can be left, apart from the problem of the banknotes of small denominations, to be dealt with later,*12 to the discretion of the Treasury and the Federal Reserve Board.

IV.23.51
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.

IV.23.52
The Federal Reserve System is saddled with an awkward problem, namely, the huge amount of government bonds held by the member banks. Whatever solution may be adopted for this question, it must not affect the purchasing power of the dollar Government finance and the nation's medium of exchange have in the future to be two entirely separate things.

IV.23.53
The banknotes issued by the Federal Reserve System as well as the silver certificates may remain in circulation. Unconditional convertibility and the strict prohibition of any further increase of their amount will have radically changed their catallactic character It is this alone that counts.

IV.23.54
However, a very important change concerning the denomination of these notes is indispensable. What the United States needs is not the gold-exchange standard but the

classical old gold standard, decried by the inflationists as orthodox. 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.

IV.23.55

This state of affairs can be easily achieved by withdrawing all bills of the denominations of five, ten, and perhaps also twenty dollars from circulation. There will be under the suggested new monetary regime two classes of legal-tender paper bills: the old stock and the new stock. The old stock consists of all those paper sheets that at the start of the reform were in circulation as legal-tender paper, without regard to their appellation and legal quality other than legal-tender power. It is strictly forbidden to increase this stock by the further issuance of any additional notes of this class. On the other hand, it will decrease to the extent that the Treasury and the Federal Reserve Board decree that the reduction in the total amount of legal-tender notes of this old stock plus bank deposits subject to check, existing at the start of the reform, has to be effected by the final withdrawal and destruction of definite quantities of such old-stock legal-tender notes. 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.

IV.23.56

It does not require any special mention that the new-stock legal-tender notes to be issued by the Conversion Agency must be issued only in denominations of one dollar or fifty dollars and upward.

IV.23.57

Old British banking doctrine banned small banknotes (in their opinion, notes smaller than £5) because it wanted to protect the poorer strata of the population, supposed to be less familiar with the conditions of the banking business and therefore more liable to be cheated by wicked bankers. Today the main concern is to protect the nation against a repetition of the inflationary practices of governments. The gold-exchange standard, whatever argument may be advanced in its favor, is vitiated by an incurable defect. It offers to governments an easy opportunity to embark upon inflation unbeknown to the nation. With the exception of a few specialists, nobody becomes aware in time of the fact that a radical change in monetary matters has occurred. Laymen, that is 9,999 out of 10,000 citizens, do not realize that it is not commodities that are becoming dearer but their tender that is becoming cheaper.

IV.23.58

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. As soon as Gres ham's law begins to come into play and bad paper drives good gold out of the pockets of the common man, there should be a stir. Perpetual vigilance on the part of the citizens can achieve what a thousand laws and dozens of alphabetical bureaus with hordes of employees never have and never will achieve: the preservation of a sound currency.

IV.23.59

The classical or orthodox gold standard alone is a truly effective check on the power of the government to inflate the currency. Without such a check all other constitutional safeguards can be rendered vain.

IV.23.60

5 The Controversy Concerning the Choice of the New Gold Parity

Some advocates of a return to the gold standard disagree on an important point with the scheme designed in the preceding section. In the opinion of these dissenters there is no reason to deviate from the gold price of $35 per ounce as decreed in 1934. This rate, they assert, is the legal parity, and it would be iniquitous to devalue the dollar in relation to it.

IV.23.61

The controversy between the two groups, those advocating the return to gold at the previous parity (whom we may call the restorers) and those recommending the adoption of a new parity consonant with the present market value of the currency that is to be put upon a gold basis (we may call them the stabilizers), is not new. It has flared up whenever a currency depreciated by inflation has had to be returned to a sound basis.

IV.23.62
The restorers look upon money primarily as the standard of deferred payments. A consistent restorer would have to argue in this way: People have in the past, that is, before 1933, made contracts in virtue of which they promised to pay a definite amount of dollars which at that time meant standard dollars, containing 25.8 grains of gold, nine-tenths fine. It would be manifestly unfair to the creditors to give the debtors the right to fulfill such contracts by the payment of the same nominal number of dollars containing a smaller weight of gold.

IV.23.63
However, the reasoning of such consistent restorers would be correct only if all existing claims to deferred payments had been contracted before 1933 and if the present creditors of such contracts were the same people (or their heirs) who had originally made the contracts. Both these assumptions are contrary to fact. Most of the pre-1933 contracts have already been settled in the two decades that have elapsed. There are, of course, also government bonds, corporate bonds, and mortgages of pre-1933 origin. But in many or even in most cases these claims are no longer held by the same people who held them before 1933. Why should a man who in 1951 bought a corporate bond issued in 1928 be indemnified for losses which not he himself but one of the preceding owners of this bond suffered? And why should a municipality or a corporation that borrowed depreciated dollars in 1945 be liable to pay back dollars of greater gold weight and purchasing power?

IV.23.64
In fact there are in present-day America hardly any consistent restorers who would recommend a return to the old pre-Roosevelt dollar. There are only inconsistent restorers who advocate a return to the Roosevelt dollar of 1934, the dollar of 15 5/21 grains of gold, nine-tenths fine. But this gold content of the dollar, fixed by the President in virtue of the Gold Reserve Act of January 30, 1934, was never a legal parity. It was, as far as the domestic affairs of the United States are concerned, merely of academic value. It was without any legal-tender validity. Legal tender under the Roosevelt legislation was only various sheets of printed paper. These sheets of paper could not be converted into gold. There was no longer any gold parity of the dollar. To hold gold was a criminal offense for the residents of the United States. The Roosevelt gold price of $35 per ounce (instead of the old price of $20.67 per ounce) had validity only for the government's purchases of gold and for certain transactions between the American Federal Reserve and foreign governments and central banks. Those juridical considerations that the consistent restorers could possibly advance in favor of a return to the pre-Roosevelt dollar parity are of no avail when advanced in favor of the rate of 1934 that was not a parity.

IV.23.65
It is paradoxical indeed that the inconsistent restorers try to justify their proposal by referring to honesty. For the role the gold content of the dollar they want to restore played in American monetary history was certainly not honest in the sense in which they employ this term. It was a makeshift in a scheme which these very restorers themselves condemn as dishonest.

IV.23.66
However, the main deficiency of any form of the restorers' arguments, whether they consistently advocate the McKinley dollar or inconsistently the Roosevelt dollar, is to be seen in the fact that they look upon money exclusively from the point of view of its function as the standard of deferred payments. As they see it, the main fault or even the only fault of an inflationary policy is that it favors the debtors at the expense of the creditors. They neglect the other more general and more serious effects of inflation.

IV.23.67
Inflation does not affect the prices of the various commodities and services at the same time and to the same extent. Some prices rise sooner, some lag behind. While inflation takes its course and has not yet exhausted all its price-affecting potentialities, there are in the nation winners and losers. Winners—popularly called profiteers if they are entrepreneurs—are

people who are in the fortunate position of selling commodities and services the prices of which are already adjusted to the changed relation of the supply of and the demand for money while the prices of commodities and services they are buying still correspond to a previous state of this relation. Losers are those who are forced to pay the new higher prices for the things they buy while the things they are selling have not yet risen at all or not sufficiently. The serious social conflicts which inflation kindles, all the grievances of consumers, wage earners, and salaried people it originates, are caused by the fact that its effects appear neither synchronously nor to the same extent. If an increase in the quantity of money in circulation were to produce at one blow proportionally the same rise in the prices of every kind of commodities and services, changes in the monetary unit's purchasing power would, apart from affecting deferred payments, be of no social consequence; they would neither benefit nor hurt anybody and would not arouse political unrest. But such an evenness in the effects of inflation—or, for that matter, of deflation—can never happen.

IV.23.68

The great Roosevelt-Truman inflation has, apart from depriving all creditors of a considerable part of principal and interest, gravely hurt the material concerns of a great number of Americans. But one cannot repair the evil done by bringing about a deflation. Those favored by the uneven course of the deflation will only in rare cases be the same people who were hurt by the uneven course of the inflation. Those losing on account of the uneven course of the deflation will only in rare cases be the same people whom the inflation has benefited. The effects of a deflation produced by the choice of the new gold parity at $35 per ounce would not heal the wounds inflicted by the inflation of the two last decades. They would merely open new sores.

IV.23.69

Today people complain about inflation. If the schemes of the restorers are executed, they will complain about deflation. As for psychological reasons, the effects of deflation are much more unpopular than those of inflation; a powerful proinflation movement would spring up under the disguise of an antideflation program and would seriously jeopardize all attempts to reestablish a sound-money policy.

IV.23.70

Those questioning the conclusiveness of these statements should study the monetary history of the United States. There they will find ample corroborating material. Still more instructive is the monetary history of Great Britain.

IV.23.71

When, after the Napoleonic wars, the United Kingdom had to face the problem of reforming its currency it chose the return to the prewar gold parity of the pound and gave no thought to the idea of stabilizing the exchange ratio between the paper pound and gold as it had developed on the market under the impact of the inflation. It preferred deflation to stabilization and to the adoption of a new parity consonant with the state of the market. Calamitous economic hardships resulted from this deflation; they stirred social unrest and begot the rise of an inflationist movement as well as the anticapitalistic agitation from which after a while Engels and Marx drew their inspiration.

IV.23.72

After the end of World War I England repeated the error committed after Waterloo. It did not stabilize the actual gold value of the pound. It returned in 1925 to the old prewar and preinflation parity of the pound. 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. The government and the journalists, both terrorized by the union leaders, timidly refrained from making any allusion to the height of wage rates and the disastrous effects of the union tactics. They blamed a mysterious overvaluation of the pound for the decline in British exports and the resulting spread of unemployment. They knew only one remedy, inflation. In 1931 the British government adopted it.

IV.23.73

There cannot be any doubt that British inflationism got its strength from the conditions that had developed out of the deflationary currency reform of 1925. It is true that but for the stubborn policy of the unions the effects of the deflation would have been absorbed long before 1931. Yet the fact remains that in the opinion of the masses, conditions gave an apparent justification to the Keynesian fallacies. There is a close connection between the

1925 reform and the popularity that inflationism enjoyed in Great Britain in the thirties and forties.

IV.23.74

The inconsistent restorers advance in favor of their plans the fact that the deflation they would bring about would be small, since the difference between a gold price of $35 and a gold price of $37 or $38 is rather slight. Now whether this difference is to be regarded as slight or not is a matter of an arbitrary judgment. Let us for the sake of argument accept its qualification as slight. It is certainly true that a smaller deflation has less undesirable effects than a bigger one. But this truism is no valid argument in favor of a deflationary policy the inexpediency of which is undeniable.

IV.23.75

6 Concluding Remarks

The present unsatisfactory state of monetary affairs is an outcome of the social ideology to which our contemporaries are committed and of the economic policies which this ideology begets. People lament over inflation, but they enthusiastically support policies that could not go on without inflation. While they grumble about the inevitable consequences of inflation, they stubbornly oppose any attempt to stop or to restrict deficit spending.

IV.23.76

The suggested reform of the currency system and the return to sound monetary conditions presuppose a radical change in economic philosophies. There cannot be any question of the gold standard as long as waste, capital decumulation, and corruption are the foremost characteristics of the conduct of public affairs.

IV.23.77

Cynics dispose of the advocacy of a restitution of the gold standard by calling it utopian. 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.

IV.23.78

APPENDIX A
On the Classification of Monetary Theories

(This Appendix was first published as a journal article in 1917-1918, it was later used as a chapter in the 2nd German edition of 1924, but was then relegated to the Appendix in the Batson translation of 1934.)

1 Catallactic and Acatallactic Monetary Doctrine

The phenomenon of money occupies so prominent a position among the other phenomena of economic life, that it has been speculated upon even by persons who have devoted no further attention to the problems of economic theory, and even at a time when thorough investigation into the processes of exchange was still unknown. The results of such speculations were various. The merchants and, following them, the jurists who were closely connected with mercantile affairs, ascribed the use of money to the properties of the precious metals, and said that the value of money depended on the value of the precious metals. Canonist jurisprudence, ignorant of the ways of the world, saw the origin of the employment of money in the command of the state; it taught that the value of money was a valor impositus. Others, again, sought to explain the problem by means of analogy. From a biological point of view, they compared money with the blood; as the circulation of the blood animates the body, so the circulation of money animates the economic organism. Or they compared it with speech, which likewise had the function of facilitating human Verkehr (interchange, trade). Or they made use of juristic terminology and defined money as a draft by everybody on everybody else.

AppA.1
All these points of view have this in common: they cannot be built into any system that deals realistically with the processes of economic activity. It is utterly impossible to employ them as foundations for a theory of exchange. And the attempt has hardly been made; for it is clear that any endeavor to bring, say, the doctrine of money as a draft into harmony with any explanation of prices must lead to disappointing results. If it is desired to have a general name for these attempts to solve the problem of money, they may be called acatallactic, because no place can be found for them in catallactics.

AppA.2
The catallactic theories of money, on the other hand, do fit into a theory of exchange ratios. They look for what is essential in money in the negotiation of exchanges; they explain its value by the laws of exchange. It should be possible for every general theory of value to provide a theory of the value of money also, and for every theory of the value of money to be included in a general theory of value. The fact that a general theory of value or a theory of the value of money fulfills these conditions is by no means a proof of its correctness. But no theory can prove satisfactory if it does not fulfill these conditions.

AppA.3
It may seem strange that acatallactic views on money were not completely suppressed by the growth of the catallactic doctrine. There were many reasons for this.

AppA.4
It is not possible to master the problems of theoretical economics unless questions of the determination of prices (commodity prices, wages, rent, interest, etc.) are at first dealt with under the supposition of direct exchange, indirect exchange being temporarily left out of account. This necessity gives rise to a division of the theory of catallactics into two parts—the doctrine of direct, and that of indirect, exchange. Now so abundant and difficult are the problems of pure theory, that the opportunity of putting part of them on one side, at least for the time being, has been very welcome. So it has come about that most recent investigators have devoted either no attention at all or very little to the theory of indirect exchange; any way, it has been the most neglected section of our science. The consequences of this omission have been most unfortunate. They have been expressed not only in the sphere of the theory of indirect exchange, the theory of money and banking, but also in the sphere of the theory of direct exchange. There are problems of theory full comprehension of which can be attained only with the aid of the theory of indirect exchange.

To seek a solution of these problems, among which, for example, is the problem of crises, with no instruments but those of the theory of direct exchange, is inevitably to go astray.

AppA.5
Thus the theory of money was meanwhile surrendered to the acatallactists. Even in the writings of many catallactic theorists, odd relics of acatallactic views are to be found. Now and then statements are met with which are not in harmony with their authors' other statements on the subject of money and exchange and which obviously have been accepted merely because they were traditional and because the author had not noticed that they clashed with the rest of his system.

AppA.6
On the other hand, the currency controversy had aroused greater interest than ever in questions of monetary theory just at the time when the coming modern theory was devoting very little attention to them. Many "practical men" ventured into this sphere. Now the practical man without general economic training who begins to meditate upon monetary problems at first sees nothing else and limits his investigation to their immediate restricted sphere without taking account of their connections with other things; it is therefore easy for his monetary theory to become acatallactic. That the "practical man," so proudly looked down upon by the professional "theorist," can proceed from investigations of monetary problems to the most penetrating comprehension of economic theory, is best shown by the development of Ricardo. The period of which we speak saw no such development. But it produced writers on monetary theory who did all that was necessary for the monetary policy of the time. From among a large number it is only necessary to mention two names—Bamberger and Soetbeer. A considerable portion of their activity was devoted to fighting the doctrines of contemporary acatallactists.

AppA.7
At present, acatallactic doctrines of money find ready acceptance among those economists who have no use for "theory." Those who, openly or implicitly, deny the necessity of theoretical investigation are not in a position to demand of a monetary doctrine that it should be possible to fit it into a theoretical system.

AppA.8

2 The "State" Theory of Money

The common characteristic of all acatallactic monetary doctrines is a negative one; they cannot be fitted into any theory of catallactics. This does not mean that they involve a complete absence of views as to the value of money. Without any such views, they would not be monetary doctrines at all. But their theories of the value of money are constructed subconsciously; they are not made explicit; they are not completely thought out. For if they were consistently thought out to their logical conclusions, it would become obvious that they were self-contradictory. A consistently developed theory of money must be merged into a theory of exchange, and so cease to be acatallactic.

AppA.9
According to the naivest and most primitive of the acatallactic doctrines, the value of money coincides with the value of the monetary material. But to attempt to go farther and begin to inquire into the grounds of the value of the precious metals, is already to have arrived at the construction of a catallactic system. The explanation of the value of goods is sought either in their utility or in the difficulty of obtaining them. In either case, the starting point has been discovered for a theory of the value of money also. Thus this naive approach, logically developed, conducts us automatically to the real problems. It is acatallactic, but it leads to catallactics.

AppA.10
Another acatallactic doctrine seeks to explain the value of money by the command of the state. According to this theory the value of money rests on the authority of the highest civil power, not on the estimation of commerce.*13 The law commands, the subject obeys. This doctrine can in no way be fitted into a theory of exchange; for apparently it would have a meaning only if the state fixed the actual level of the money prices of all economic goods and services as by means of general price regulation. Since this cannot be asserted to be the case, the state theory of money is obliged to limit itself to the thesis that the state command

establishes only the Geltung or validity of the money in nominal units, but not the validity of these nominal units in commerce. But this limitation amounts to abandonment of the attempt to explain the problem of money. By stressing the contrast between valor impositus and bonitas intrinseca, the canonists did indeed make it possible for scholastic sophistry to reconcile the Roman-canonist legal system with the facts of economic life. But at the same time they revealed the intrinsic futility of the doctrine of valor impositus; they demonstrated the impossibility of explaining the processes of the market with its assistance.

AppA.11
Nevertheless the nominalistic doctrine did not disappear from monetary literature. The princes of the time, who saw in the debasement of money an important means of improving their financial position, needed the justification of this theory, If, in its endeavors to construct a complete theory of the human economy, the struggling science of economics kept itself free from nominalism, there were nevertheless always enough nominalists for fiscal needs. At the beginning of the nineteenth century, nominalism still had representatives in Gentz and Adam Müller, writing in support of the Austrian monetary policy of the Bankozettel period. And nominalism was used as a foundation for the demands of the inflationists. But it was to experience its full renascence in the German "realistic" economics of the twentieth century.

AppA.12
An acatallactic monetary theory is a logical necessity for the empirico-realistic trend in economics. Since this school, unfavorable to all "theory," refrains from propounding any system of catallactics, it is bound to oppose any monetary doctrine that leads to such a system. So at first it avoided any treatment of the problem of money whatever; so far as it did touch upon this problem (in its often admirable work on the history of coinage and in its attitude toward political questions), it retained the traditional Classical theory of value. But gradually its views on the problem of money glided unconsciously into the primitive acatallactic ideas described above, which regard money made of precious metal as a good that is valuable "in itself." Now this was inconsistent. To a school that has inscribed the device of etatism on its banner, and to which all eco nomic problems appear as questions of administration, the state theory of nominalism is more suitable.*14 Knapp completed this connection. Hence the success of his book in Germany.

AppA.13
The fact that Knapp has nothing to say about the catallactic monetary problem, the problem of purchasing power, cannot be regarded as an objection from the point of view of a doctrine which repudiates catallactics and has abandoned in advance any attempt at a causal explanation of the determination of prices. The difficulty over which the older nominalistic theories had come to grief did not exist for Knapp, whose public consisted solely of the disciples of the realistic economics. He was able—in fact, considering his public, he was bound—to abandon all attempt at an explanation of the validity of money in commerce. If important questions of monetary policy had arisen in Germany in the years immediately succeeding the appearance of Knapp's work, then the inadequacy of a doctrine that was unable to say anything about the value of money would naturally have soon become evident.

AppA.14
That the new state theory did compromise itself immediately it was put forward, was due to its unlucky attempt to deal with currency history from an acatallactic point of view. Knapp himself, in the fourth chapter of his work, had briefly related the monetary history of England, France, Germany, and Austria. Works on other countries followed, by members of his seminar. All of these accounts are purely formal. They endeavor to apply Knapp's scheme to the individual circumstances of different states. They provide a history of money in Knappian terminology.

AppA.15
There could be no doubt of the results that were bound to follow from these attempts. They expose the weaknesses of the state theory. Currency policy is concerned with the value of money, and a doctrine that cannot tell us anything about the purchasing power of money is not suitable for dealing with questions of currency policy. Knapp and his disciples enumerate laws and decrees, but are unable to say anything about their motives and effects. They do not mention that there have been parties supporting different currency policies. They know nothing, or nothing of great importance, about bimetallists, inflationists, or restrictionists; for them, the supporters of the gold standard were led by "metallistic superstition," the

opponents of the gold standard were those who were free from "prejudices." They studiously avoid all reference to commodity prices and wages and to the effects of the monetary system on production and exchange. Beyond making a few remarks about the "fixed rate of exchange," they never touch upon the connections between the monetary standard and foreign trade, the problem which has played so great a part in currency policy. Never has there been a more miserable and empty representation of monetary history.

AppA.16
As a result of the World War, questions of currency policy have again become very important, and the state theory feels itself obliged to produce something on topical questions of currency policy. That it has nothing more to say about these than about the currency problems of the past is shown by Knapp's article "Die Währungsfrage bei einem deutsch-österreichischen Zollbündnis" in the first part of the work published by the Verein für Sozialpolitik: Die wirtschaftliche Annäherung zwischen dem deu tschen Reiche und seinen Verbündeten. There can hardly be two opinions about this essay.

AppA.17
The absurdity of the results at which the nominalistic doctrine of money is bound to arrive as soon as it begins to concern itself with the problems of monetary policy is shown by what has been written by Bendixen, one of Knapp's disciples. Bendixen regards the circumstance that the German currency had a low value abroad during the war as "even in some ways desirable, because it enabled us to sell foreign securities at a favourable rate."*15 From the nominalistic point of view this monstrous assertion is merely logical.

AppA.18
Bendixen, incidentally, is not merely a disciple of the state theory of money; he is at the same time a representative of that doctrine also which regards money as a claim. In fact, acatallactic views can be blended according to taste. Thus Dühring, who in general regards metallic money as "an institution of Nature," holds the claim theory but at the same time rejects nominalism.*16

AppA.19
The assertion that the state theory of money has been disproved by the events of currency history since 1914 must not be understood to mean that it has been disproved by "facts." Facts per se can neither prove nor disprove; everything depends upon the significance that can be given to the facts. So long as a theory is not thought out and worked up in an absolutely inadequate manner, then it is not a matter of supreme difficulty to expound it so as to explain the "facts"—even if only superficially and in a way that can by no means satisfy truly intelligent criticism. It is not true, as the naive scientific doctrine of the empirico-realistic school has it, that one can save oneself the trouble of thinking if one will only allow the facts to speak. Facts do not speak; they need to be spoken about by a theory.

AppA.20
The state theory of money—and all acatallactic theories of money in general—breaks down not so much because of the facts as because of its inability even to attempt to explain them. On all the important questions of monetary policy that have arisen since 1914, the followers of the state theory of money have maintained silence. It is true that even in this period their industry and zeal have been demonstrated in the publication of ample works; but they have not been able to say anything on the problems that occupy us nowadays. What could they, who deliberately reject the problem of the value of money, have to say about those problems of value and price which alone constitute all that is important in the monetary system? Their peculiar terminology does not bring us a step nearer to a decision about the questions that are agitating the world at present.*17 Knapp is of the opinion that these questions do not need to be solved except by the "economists," and concedes that his doctrine has nothing to say about them.*18 But if the state theory does not help to elucidate the questions that seem important to us, what is its use? The state theory is not a bad monetary theory; it is not a monetary theory at all.*19

AppA.21
To ascribe to the state theory a large share of the blame for the collapse of the German monetary system, does not imply that Knapp directly provoked the inflationary policy that led to it. He did not do that. Nevertheless, a doctrine that does not mention the quantity of money at all, that does not speak of the connection between money and prices, and that asserts that the only thing that is essential in money is the authentication of the state,

directly encourages fiscal exploitation of the "right" of creating money. What is to prevent a government from pouring more and more notes into circulation if it knows that this will not affect prices, because all rises in prices can be explained by "disturbed trade conditions" or "disturbances in the home market," but on no account whatever by anything to do with money? Knapp is not so incautious as to speak of the valor impositus of money as did the canonists and jurists of past generations. All the same, his doctrine and theirs lead indifferently to the same conclusions.

AppA.22
Knapp, unlike some of his enthusiastic disciples, was certainly not a government hireling. When he said anything, he said it from genuine personal conviction. That speaks well for his own trustworthiness, but it has no bearing on that of his doctrine.

AppA.23
It is quite incorrect to say that the monetary doctrine of etatism springs from Knapp. The monetary doctrine of etatism is the balance-of-payments theory, which Knapp only refers to casually in speaking of the "pantopolic origin of the exchange rates."*20 The balance-of-payments theory, if an untenable, is at least a catallactic, theory of money. But it was invented long before Knapp's time. It had already been propounded, with its distinction between the internal value (Binnenwert) and the external value (Aussenwert) of money, by the etatists, by Lexis, for example.*21 Knapp and his school added nothing to it.

AppA.24
But the etatist school is responsible for the facility and rapidity with which the state theory of money succeeded in becoming the accepted doctrine in Germany, Austria, and Russia. This school had struck out catallactics, the theory of exchange and prices, as superfluous from the series of problems with which economics was concerned; it undertook the attempt to represent all the phenomena of social life merely as emanations of the exercise of power by princes and others in authority. It is only a logical extension of its doctrine to endeavor eventually to represent money also as being created merely by force. The younger generation of etatists had so little notion even of what economics really was concerned with, that it was able to accept Knapp's paltry discussion as a theory of money.

AppA.25

3 Schumpeter's Attempt to Formulate a Catallactic Claim Theory

To call money a claim is to suggest an analogy to which there is no real objection. Although this comparison, like all others, falls short at certain points, it may nevertheless make it easier for many to form a conception of the nature of money. Admittedly analogies are not explanations, and it would be a gross exaggeration to speak of a claim theory of money, for mere construction of an analogy does not take us even halfway to any sort of monetary theory that can be expressed in intelligible arguments. The only possible way of building a monetary theory upon the claim analogy would be to regard the claim, say, as a ticket of admission to a room of limited size, so that an increase in the number of tickets issued would mean a corresponding diminution of the amount of room at the disposal of each ticketholder. But the danger in this way of thinking is that taking this illustration as a starting point could lead only to the drawing of a contrast between the total amount of money and the total amount of commodities; but this amounts to nothing but one of the oldest and most primitive versions of the quantity theory, the untenability of which needs no further discussion.

AppA.26
Thus until recently the claim analogy led a precarious existence in the expositions of monetary doctrine, without having any greater significance—as was imagined—than that of a means of expression that could easily be understood by all. Even in the writings of Bendixen, who would have been glad to see his obscure arguments designated a claim theory, the claim concept has no greater significance ascribed to it. But very recently an ingenious attempt has been made by Schumpeter to arrive at a real theory of the value of money starting from the claim analogy, that is, an attempt to construct a catallactic claim theory.

AppA.27
The fundamental difficulty that has to be reckoned with in every attempt to construct a theory of the value of money starting from the claim concept is the necessity for comparing

the quantity of money with some other total, just as in the ticket illustration the total number of tickets is compared with the total amount of room available. Such a comparison is a necessity for a doctrine which regards money as "claims" whose peculiarity consists in the fact that they do not refer to definite objects but to shares in a mass of goods. Schumpeter seeks to avoid this difficulty by starting, in elaboration of a line of argument first developed by Wieser, not from the quantity of money, but from the sum of money incomes, which he compares with the total prices of all consumption goods.*22 There might be some justification for such a comparison if money had no other use than to purchase consumption goods. But such an assumption is obviously quite unjustifiable. Money bears a relationship, not only to consumption goods, but also to production goods; and—the point is a particularly important one—it does not serve only for the exchange of production goods against consumption goods but very much oftener for the exchange of production goods against other production goods. So Schumpeter is only able to maintain his theory by simply putting out of consideration a large part of that which circulates as money. He says that commodities are actually related only to the circulating portion of the total quantity of money, that only this portion has an immediate connection with the sum of all incomes, that it alone fulfills the essential function of money. Thus "to obtain the quantity of money in circulation, which is what we are concerned with," the following items, among others, have to be eliminated:

1 Hoards
2 "Sums that are unemployed but awaiting employment"
3 Reserves by which we are to understand those sums of money "below which the economic agents never let their holdings fall; in order to be prepared for unexpected demands"

AppA.28
But even the elimination of these sums is not enough; we must go still farther. For the total incomes theory is "not concerned even with the total quantity of money in circulation." In addition we must exclude "all those sums that circulate in the 'income-distributing' markets, in the real estate, mortgage, security and similar markets."*23

AppA.29
These limitations do not merely serve, as Schumpeter thinks, to demonstrate the impossibility of dealing statistically with the notion of money in effective circulation; they also cut away the ground from beneath his own theory. All that needs to be said about the separation of hoards, unemployment sums, and reserves, from the remaining amount of money has already been mentioned above.*24 It is inadmissible to speak of "sums that are unemployed but awaiting employment." In a strict and exact sense—and theory must take everything in a strict and exact sense—all money that is not changing owners at the very moment under consideration is awaiting employment. Nevertheless, it would be incorrect to call such money "unemployed"; as part of a reserve it satisfies a demand for money, and consequently fulfills the characteristic function of money. And when Schumpeter further proposes to eliminate the sums in circulation in the income-distributing markets, we can only ask, What then remains?

AppA.30
Schumpeter has to do violence to his own theory in order to make it appear even fairly tenable. It cannot be compared with the point of view which opposes the total stock of money to the total demand for it (that is, to the total demand of economic agents for reserves), because it does not really attempt to solve more than a small part of the problem. To be of any use, a theory must try to explain the whole of the problem that is before us. Schumpeter's theory arbitrarily splits up the stock of money and the demand for money in order to institute a comparison that would otherwise be impossible. If Schumpeter starts from the statement that the total quantity of money is distributed between three spheres, the sphere of circulation, that of hoards and reserves, and that of capital, then, if he wishes to provide a complete theory of money, the comparison which he makes for the sphere of circulation between total incomes and total amount of consumption goods should be repeated for the two other spheres also; for these also are not without significance in the determination of the value of money. Variations in the amount of money demanded or available for hoards and reserves—to retain this vague distinction—or for the sphere of capital, influence the value of money just as much as variations in the sphere of circulation. No theory of the value of money with pretensions to completeness dare omit an explanation of the influence on the value of money exerted by processes in the sphere of hoards and reserves and in that of capital.

AppA.31
We see, then, that even Schumpeter has not been able to make a complete catallactic theory of money out of the claim theory. The fact that his attempt to make the claim theory into a catallactic theory of money obliged him to set such extraordinary limits to the problem is the best proof that a comprehensive catallactic theory of money cannot be constructed on the basis of the claim analogy. His having arrived in the course of his admirable discussion at conclusions for the rest which do not differ essentially from those which have been discovered in other ways and with other instruments by the catallactic doctrine of money is merely to be ascribed to his having found them in the theory of money already and having therefore been able to adopt them. They by no means follow from the fragmentary theory of money that he himself has put forward.

AppA.32

4 "Metallism"

It is no longer necessary to continue to argue against the nominalistic theory of money. For theoretical economics it has long been finished with. Nevertheless, the nominalist controversy has propagated errors in the history of doctrine that need to be weeded out.

AppA.33
First of all, there is the use of the term metallism. The expression comes from Knapp. "Those writers who start from weight and fineness and see in the stamp nothing but an attestation of these properties," Knapp christens metallists. "The metallist defines the unit of value as a certain quantity of metal."*25

AppA.34
This definition of metallism given by Knapp is by no means a clear one. It should be pretty well known that there can hardly have been a single writer worth mentioning who has thought of the unit of value as consisting of a quantity of metal. But it must be remembered that, with the exception of the nominalists, there has never been a school so easily satisfied in the interpretation of the concept of value as that of Knapp, for whom the unit of value "is nothing but the unit in which the amount of payments is expressed."*26

AppA.35
But it is easy to see what Knapp means by metallism even if he does not explicitly say it. For Knapp metallism is all the theories of money that are not nominalistic;*27 and since he formulates the nominalistic doctrine with precision, it is clear what he understands by metallism. That those theories of money which are not nominalistic have no uniform characteristic, that there are catallactic and acatallactic theories among them, that each of these two groups is again divided into various opposed doctrines, is either unknown to Knapp, or willfully overlooked by him. For him, all nonnominalistic theories of money are but one. Nowhere in his writing is there anything to suggest that he knows of the existence of other monetary doctrines than that which regards metallic money as material valuable "in itself." He even completely ignores the existence of economic theories of value—not merely the existence of any particular theory but the existence of all of them. He invariably polemizes against the only theory of money known to him, which he believes to be the only theory opposed to nominalism, and which he calls metallism. His arguments are useless because they apply only to this one acatallactic doctrine which, with all other acatallactic theories, including nominalism, was long ago overthrown by economic science.

AppA.36
All controversial writers have to set themselves limits. In any field that has been much worked over it is impossible to confute all opposing views. The most important opposing opinions, the typical ones, those which seem to threaten most one's own point of view, must be selected, and the rest passed over in silence. Knapp writes for the German public of the present day, which, under the influence of the etatistic version of political economy, acquainted only with acatallactic theories of money, and even among these only with those which he calls metallistic. The success that he has met with here shows that he was right in directing his criticism only against this version, which is hardly represented in literature, and on the other hand in ignoring Bodin, Law, Hume, Senior, Jevons, Menger, Walras, and everybody else.

AppA.37
Knapp makes no attempt at all to determine what economics says about money. He only asks, "What does the educated man think of when he is asked about the nature of money?"*28 He then criticizes the views of the "educated man," that is, apparently, the layman. Nobody will deny him the right to do this. But it is not permissible, having done it, to set up these views of the educated man as those of scientific economics. Nevertheless, this is what Knapp does when he describes the monetary theory of Adam Smith and David Ricardo as "entirely metallistic" and adds: "This theory teaches that the unit of value (the pound sterling) is definable as a certain weight of metal."*29 The mildest thing that can be said about this assertion of Knapp's is that it is entirely unfounded. It most bluntly contradicts the views of Smith and Ricardo on the theory of value, and it does not find the least support in any of their writings. It will be obvious to all who have even only a superficial acquaintance with the value theory of the Classicals and their theory of money that Knapp has here committed an incomprehensible error.

AppA.38
But neither were the Classicals "metallists" in the sense that their only contribution to the problems of paper money was "indignation."*30 Adam Smith expounded the social advantages arising from the "substitution of paper in the room of gold and silver money" in a manner that has hardly been equaled by any writer before or after him.*31 But it was Ricardo, in his pamphlet "Proposals for an Economical and Secure Currency," published in 1816, who elaborated this point of view and recommended a monetary system under which precious-metal money should be entirely eliminated from actual domestic circulation. This suggestion of Ricardo's was the basis of that monetary system, first established at the end of the last century in India, then in the Straits Settlements, then in the Philippines, and finally in Austria-Hungary, that is usually known nowadays as the gold-exchange standard. Knapp and his fellow enthusiasts for "modern monetary theory" could easily have avoided the mistakes they made in explaining the policy followed by the Austro-Hungarian Bank between 1900 and 1911, if they had taken note of what Smith and Ricardo had said in these passages.*32

AppA.39

5 The Concept of "Metallism" in Wieser and Philippovich

Knapp's mistakes in the history of theory have unfortunately already been accepted by other writers. This started with the attempt to expound Knapp's theory in the most kindly manner possible, that is, to judge its weaknesses gently and if possible to credit it with some sort of usefulness. But this was not possible without reading into the state theory things that simply cannot be found in it, things in fact which definitely contradict both its spirit and its letter, or without taking over Knapp's mistakes in the history of theory.

AppA.40
First, Wieser must be mentioned. Wieser draws a contrast between two monetary theories. "For the metallists, money has an independent value, arising from itself, from its substance; for modern theory, its value is derived from that of the objects of exchange, the commodities."*33 Again, in another place, Wieser says: "The value of the monetary material is a conflux from two different sources. It is constituted from the use value which the monetary material obtains by reason of its various industrial employments—for jewelry, for utensils, for technical uses of all kinds—and from the exchange value which the money obtains by reason of being a means of payment ... The service performed by the coins as a medium of exchange and that performed by the money in its industrial uses, lead in combination to a common estimate of its value ... We may ... assert, that each of the two services is independent enough to be able to go on existing even if the other ceased. Just as the industrial functions of gold would not cease if gold were no longer coined, so its monetary functions would not come to an end if the state decided to forbid its use in industry and requisitioned it all for minting ... The dominant metallistic opinion is different. From this point of view, the metal value of the money means the same thing as the use value of the metal; it has only the one source—industrial employment—and if the exchange value of the money coincides with its metal value, then it is nothing but a reflection of the use value of the metal. According to the prevailing metallistic opinion, money made from valueless material is inconceivable; for, it is said, money could not measure the value of commodities if it was not valuable itself, by virtue of the material from which it is made."*34

AppA.41
Here Wieser contrasts two theories of the value of money: the modern and the metallistic. The theory which he calls the modern is the monetary theory that logically follows from that theory of value which traces value to utility. Now since the utility theory has only recently received scientific exposition (to have contributed to which is one of Wieser's great merits), and since it undoubtedly may nowadays be regarded as the prevailing doctrine (pace Wieser himself, who calls metallism the prevailing doctrine), it may well be admissible to call that monetary theory which is based upon it the modern theory . But in so doing we must not forget that, just as the subjective theory of value can look back over a long history, so also the theory of money corresponding to it is already more than two hundred years old. For example, as early as the year 1705 John Law had expressed it in classical form in his Money and Trade. A comparison of Law's arguments with those of Wieser will demonstrate the fundamental agreement between their views.*35

AppA.42
But this theory, which Wieser calls the modern, is certainly not the doctrine of Knapp; in Knapp, not the slightest suggestion of it can be discovered. All that it has in common with his nominalism, which ignores the problem of the value of money, is the fact that neither is "metallistic."

AppA.43
Wieser himself sees quite clearly that his theory has nothing to do with that of Knapp. Unfortunately however, he takes over from Knapp the opinion that according to the "prevailing metallistic opinion," the "metal value of the money means the same as the use value of the metal." Several serious mistakes in the history of theory are here all mixed up together.

AppA.44
The first thing to observe is that by metallism Wieser means something different from Knapp. Wieser contrasts the "modern" theory of the value of money with the "metallistic," and describes exactly what he understands by the terms. According to this, the two views are opposed to each other; the one excludes the other. But, for Knapp, the theory that Wieser calls the modern theory is just as metallistic as the others. The truth of this can easily be demonstrated.

AppA.45
In his principal book, Knapp never mentions the names of any writers who themselves have dealt with the problem of money; neither does he quote any work on the subject. He nowhere argues against any of the trains of thought that are usually met with in the abundant literature of money. His quarrel is always only with the metallism that he sets up as the general opinion on money. In his preface, it is true, he refers expressly to two writers as metallists: Hermann and Knies.*36 But both Hermann and Knies expounded theories very similar to the "modern" theory expounded by Wieser. This should not appear strange, for both of these writers take their stand on the subjective theory of value,*37 from which the "modern" doctrine of the value of money logically follows, so that both regard the foundation of the use-value of the precious metals as lying both in their monetary uses and their "other" uses.*38 Between Wieser and Knies there is a difference, it is true, concerning the effect on the monetary function of the possibility of cessation of the "other" functions. Yet Knapp could not have regarded this as the decisive characteristic, or he would have been sure to mention it somewhere, and in fact he has nothing more to say about it than about any other problem of the value of money.

AppA.46
It is, indeed, not among the economists that we must seek the metallists, as they are portrayed by Knapp and his school. Knapp knows very well why he always argues only against this arbitrary caricature of a metallist, and prudently refrains from quoting chapter and verse for the opinions that he puts in the mouth of this metallist. In fact the metallist that Knapp has in mind is none other than Knapp himself; not the Knapp that wrote the State Theory of Money, but the Knapp that, "disregarding all theory" as he himself testifies, used to lecture on the "pragmatic" of the monetary system;*39 the Knapp that, as one of the standard-bearers of historicism in political economy, had thought that a substitute for thinking about economic problems could be found in the publication of old documents. If Knapp had not looked down so arrogantly on the work of the much abused "theorists," if he had not disdained to have anything to do with it, he would have discovered that he had been

entertaining an entirely false opinion of its content. The same is true of Knapp's disciples. Indeed, their leader Bendixen openly admits that he was once a "metallist."*40

AppA.47
It is by no means desirable to follow Wieser's example in giving the title of prevailing doctrine to the view that the value of the monetary material arises solely from its industrial employment. Surely a view concerning money that has been rejected by Knies cannot be regarded as the prevailing doctrine.*41 There can be no question that the whole literature of money, so far as it is based on the conclusions of modern theory is not metallistic in Wieser's sense; but neither, for that matter, is any other catallactic theory of money.

AppA.48
In fact Wieser's opinion of the monetary theories of his precursors has been distorted by his acceptance of the expression metallism. He himself did not fail to notice this; for he supplements the remarks quoted above with the following words: "The dominant doctrine does not remain true to itself, for it ... develops a special theory to explain the exchange value of money. If the value of money was always limited by the use value of the metal, what influence would remain to be exerted by the demand for money the velocity of circulation, or the amount of credit substitutes?" The solution of this apparent contradiction must be sought in the fact that what Wieser calls the prevailing metallistic doctrine is in the very sharpest contrast to those catallactic theories which "develop a special theory to explain the exchange value of money."

AppA.49
Like Wieser, Philippovich also draws a contrast between two theories of the value of money; the nominalistic (represented by Adam Müller, Knapp, and others; Philippovich also includes Adolf Wagner in this group); and those which reject the nominalistic attitude. As representing this second group, he names only my Theorie des Geldes und der Umlaufsmittel.*42 He adds the remark that, in discussing the value of money, I had been forced to admit that the value of commodity money only bears upon the theory of the value of money insofar as it depends upon its function as a common medium of exchange.*43 In this, through following the historical views of Knapp, Philippovich falls into the same errors as Wieser.

AppA.50
While Wieser rejects the chartal and nominal theory of money, Philippovich confesses his allegiance to it, but at the same time interprets it in a way that entirely effaces the difference between the catallactic and the nominalistic conception. On the one hand, he declares that "the essential thing about the monetary unit is its nominal Geltung or validity as a unit of value." And on the other hand, he says that "the monetary unit is not really this technically defined quantity of precious metal, but its power of purchase or payment."*44 These are two theses that cannot be reconciled. We have already met the former, as Knapp's definition; the latter is the starting point of all catallactic theories of money. A sharper contrast could hardly be imagined.

AppA.51
That the identification of the monetary unit with purchasing power, so far from expressing Knapp's views, completely contradicts them, may be clearly deduced from several passages in his writings.*45 The very thing that characterizes nominalism—like all acatallactic theory in general—is the fact that it does not speak of the value, the purchasing power, of money. It is easy to show how irreconcilable are the two theses that Philippovich propounds. Within the limits of his own theory, Knapp is formally correct when he defines the mark as "the third part of the preceding unit of value, the thaler."*46 However uninformative this definition may be, it contains nothing contradictory in itself. It is otherwise when Philippovich declares that "the silver mark, as the third part of the thaler, was previously the unit of money for reckoning purposes, which, in the experience of economic agents, represented a certain purchasing power. This purchasing power had to be retained in the unit of coinage of the new metal; that is, the mark as a gold coin had to represent the same quantity of value as had previously been represented by the silver mark. The technical determination of the unit of coinage therefore has the aim of maintaining the value of the monetary unit."*47 These sentences, in connection with those previously quoted, can apparently only mean that the reform of the German monetary system had aimed to establish the purchasing power of the thaler at its transmitted level. But this can hardly be Philippovich's real opinion.

AppA.52
There is yet another historical error that has been taken over by Philippovich from Knapp, namely, the belief that the catallactic doctrine of money disregards actual experience, "which provides examples enough of the forced circulation of state paper money."*48 Any catallactic writing, including the first edition of the present book, which is the only work referred to by Philippovich in this connection, would prove the contrary. It is possible to assert that the catallactists have not solved the problem of such paper money in a satisfactory manner—that is still an open question; but it will not do to assert that they have disregarded its existence. This is a particularly important point, because many of Knapp's disciples think that catallactic theories of money have been confuted by the paper-money economics of the war period; as if this was not a problem that has been dealt with by all monetary theories since Ricardo.

AppA.53
When Knapp's mistakes about the views on monetary theory of earlier and contemporary economists have been accepted by two such eminent experts in the history and literature of political economy as Wieser and Philippovich, it should not surprise us if the majority of those now at work in Germany on monetary problems base their history of theory entirely on Knapp.

AppA.54

6 Note: The Relation of the Controversy About Nominalism to the Problems of the Two English Schools of Banking Theory

A writer identifies the metallistic theory with the currency principle and calls the chartal theory "a variety of the old banking principle."*49 Again, another writer is of the opinion that there is "a certain justification for giving the name of economic nominalism to the doctrine of the Currency School, so far as it is based upon a like treatment of both metallic and paper money."*50 Both would appear to be mistaken. The opposition between the two famous schools of the theory of credit lies in quite another sphere.*51 Knapp and his disciples have never so much as perceived the problems with which they were concerned, much less attempted to solve them.

AppA.55
Bendixen's doctrine of the creation of money, which is connected only accidentally and loosely with Knapp's nominalism, is admittedly nothing but an exaggerated and extremely naive version of the Banking principle. It is a particularly characteristic sign of the low state of German economic theory that for many years Bendixen's doctrine could have been regarded as something new without it being remarked that it was at most only in the way in which it was expounded that it differed from the doctrine that had been predominant in Germany for decades.

AppA.56

APPENDIX B
Translator's Note on the Translation of Certain Technical Terms

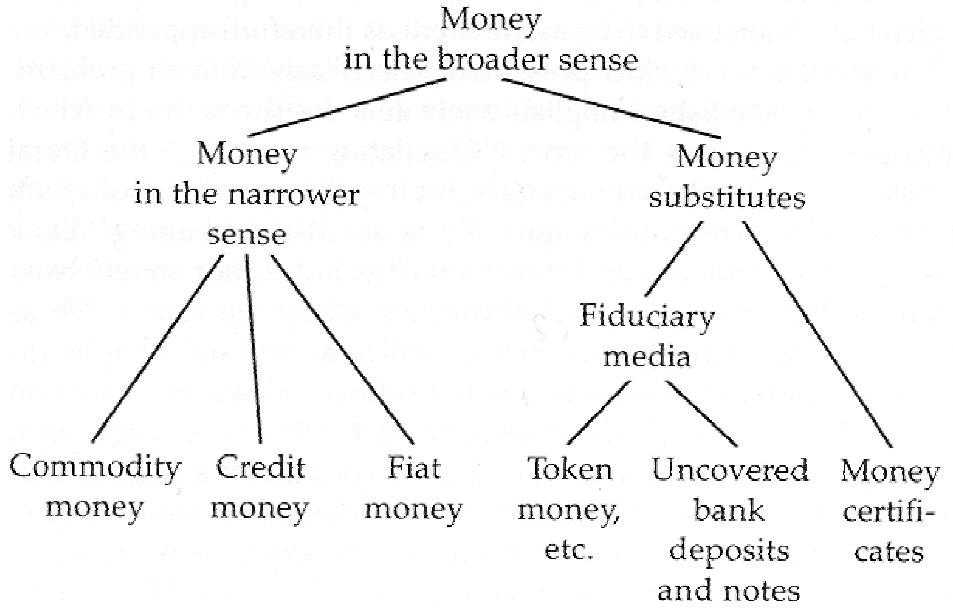
It is never possible to be certain that the full significance of a technical term has been brought out in a translation. A short list of the original German terms for the kinds of money and money substitutes mentioned in the present work, and of the English expressions which have been used to translate them, is therefore appended.

AppB.1
The word Umlaufsmittel presented a peculiarly difficult problem. There is no established English equivalent for the sense in which Professor Mises uses the term. "Circulating medium," the literal translation, is clearly inappropriate, for it suggests associations with currency which are quite foreign to Professor Mises' meaning. "Bank money" is inadequate, for Umlaufsmittel includes, not merely bank deposits, but also money substitutes issued by the state (such as token money). "Credit instrument," which at first sight might appear satisfactory, is inconsistent with Professor Mises' insistence on the difference between Umlaufsmitteln and bills of exchange; and, furthermore, Professor Mises explicitly argues that the issue of Umlaufsmitteln is not a credit transaction in the more fundamental sense. For want of a better equivalent, therefore, the expression "fiduciary medium" has been adopted. It accords with Professor Mises' definition of Umlaufsmitteln as money substitutes not covered by money,*52 and it evokes associations with the controversies about the Peel Act of 1844 that are in harmony with Professor Mises' attitude. It also draws attention to Professor Mises' emphasis upon the similarity between uncovered bank deposits and uncovered notes.

AppB.2
The following equivalents for other technical terms have also been adopted:*53

Money in the broader sense (Geld im weiteren Sinne)
Money in the narrower sense (Geld im engeren Sinne)
Money substitute (Geldsurrogat)
Commodity money (Sachgeld)
Credit money (Kreditgeld)
Fiat money (Zeichengeld)
Token money (Scheidemünzen)
Money certificate (Geldzertifikat)
Commodity credit (Sachkredit)
Circulation credit (Zirkulationskredit)

AppB.3
The following diagram shows the relationships between some of these terms in Professor Mises' system:


Money
in the broader sense
Money
in the narrower
sense
Money
substitutes
Fiduciary
media
Commodity
money
Credit
money
Fiat
money
Token
money,
etc.
Uncovered
bank
deposits
and notes
Money
certifi-
cates

AppB.4

Biographical Note

Ludwig von Mises (1881-1973) was the acknowledged leader of the Austrian School of economic thought, a prodigious originator in economic theory, and a prolific author. A library of his books would total twenty-one volumes if confined to first editions, forty-eight volumes if all revised editions and translations were included, and still more if the Festschriften and other volumes containing contributions by him were added.

B.1

Von Mises' writings and lectures encompassed economic theory, history, epistemology, government, and political philosophy. His contributions to economic theory include important clarifications on the quantity theory of money, the theory of the trade cycle, the integration of monetary theory with economic theory in general, and a demonstration that socialism must fail because it cannot solve the problem of economic calculation. Mises was the first scholar to recognize that economics is part of a larger science of human action, a science which Mises called "praxeology".

B.2

Ludwig von Mises received doctorates in law and economics from the University of Vienna in 1906. In 1909 he became Economic Advisor to the Austrian Chamber of Commerce (comparable to the U.S. Department of Commerce). After serving in World War I, he became Professor of Economics at the University of Vienna and, in 1934, Professor of International Relations at the Graduate Institute of International Studies in Geneva. In 1945 he became Visiting Professor at New York University where he remained until his retirement in 1969. In a lecturing and teaching career that spanned many continents and more than half a century, Mises numbered among his students one Nobel Laureate, F. A. Hayek, two presidents of the American Economic Association, Gottfried Haberler and Fritz Machlup, and many other economists of international reputation.

B.3

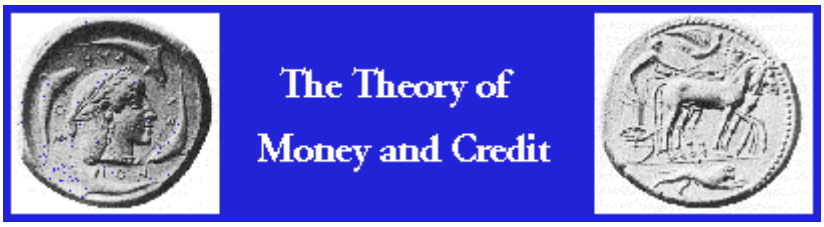
His major works are The Theory of Money and Credit (1912), Socialism (1922), Human Action (1949), Theory and History (1957), Epistemological Problems of Economics (1960), and The Ultimate Foundations of Economic Science (1962).

B.4

Murray N. Rothbard, who wrote the Introduction, is Professor of Economics at the Polytechnic Institute of New York. He is the author of Man, Economy, and State, America's Great Depression, and many other books, essays, and articles.

B.5

Silver Demereteia of Syracuse
(480-479 B.C.)



The silver Demereteia, which is used in the jacket design, was struck by Gelon, Lord of Syracuse, celebrating his victory over the Carthaginians in the decisive battle of Himera in Sicily. On one side of the coin is a charioteer, symbolizing Gelon's forces, with the winged goddess of Victory, Nike, crowning the chariot with laurel. The lion in flight below represents the defeated Carthaginians. On the other side is a head, possibly that of the goddess Arethusa, since the dolphins surrounding her stand for the sea around the island of Ortygia on which the goddess was worshipped. Or, the head could be that of Gelon's queen, Demerete, whose name was given to the coin (Demereteia) and all others of the same issue (Demereteion) in honor of her gift of personal jewelry to the treasury of Syracuse in the war with Carthage. Another legend has it that Demerete gained favorable terms for the vanquished Carthaginians and received from them a hundred talents of gold which she contributed to financing the striking of the Demereteia.

D.1
The Greeks had learned the art of coinage from the Lydians who had invented it around 700 B.C. The Lydian Empire comprised most of what is now Turkey. The first Lydian coinage was developed by private individuals—goldsmiths, bankers, merchants—not by authority of the Emperor. The need for coinage as a reliable medium of exchange derived from Lydia's position as the industrial power of the ancient world. Prior to the development of coinage, media of exchange were clumsy bars or pieces of metal.

D.2
The Greek city states adopted coinage but habitually and shamelessly debased their coins. Said Demosthenes: "the majority of states are quite open in using silver coins diluted with copper and lead." Only Athens, excepting its one major devaluation by Solon, maintained throughout its history the purity of its coinage, a fact which does much to explain the extension of Athenian commercial and political power over all of Greece.

D.3

Frank H. Knight, Risk, Uncertainty, and Profit:
NOTES

Notes

Notes to the Electronic Edition:

* The Library of Economics and Liberty electronic edition is taken from that translated by H. E. Batson, published by Liberty Fund, 1980; © 1980 by Bettina Bien Greaves. Footnote references in the text are color coded according to authorship as follows:

14* Mises's original notes, color-coded blue in the text, are unbracketed and unlabeled in the footnote file. Also color-coded blue and unbracketed are notes in sections written by others: Batson's Appendix B, the Foreward, and Introduction.

14* [Batson's notes, color-coded gold in the text, are bracketed in the footnote file, and initialed H.E.B.]

* Occasional website (Library of Economics and Liberty) Editor's notes, color-coded red in the text, are unbracketed and indicated by asterisks without numbers in the text.

Frontmatter

1. The English translation of Menger's Grundsätze only first appeared in 1950. See Carl Menger, Principles of Economics (New York: New York University Press, 1981).

2. The first complete English translation of the third/fourth German edition, by George D. Hunke and Hans F. Sennholz, was published by Libertarian Press, South Holland, III., in 1959; it includes: Volume I, History and Critique of Interest Theories; Volume II, Positive Theory of Capital; and Volume III, Further Essays on Capital and Interest.

3. Except for one minor change of tense. In the second edition, the author prefaced the first major division of the last chapter of part three with a note to the effect that this section was to be read as referring to the time about 1912, when it was originally written. In the present edition, in order to prevent certain misunderstandings that seemed possible even if this note had been reprinted in its proper place on p. 406, certain practices and circumstances (especially in sections 4 to 8) have been described in the past tense. (Cf. pp. 406 n. z, 416 n., and also 429 n.)

4. See Altmann, "Zur deutschen Geldlehre des 19. Jahrhunderts," in Die Entwicklung der deutschen Volkswirtschaftslehre im 19. Jahrhundert, Schmoller Festschrift (Leipzig, 1908).

5. See Döring, Die Geldtheorien seit Knapp, 1st ed. (Greifswald, 1921; 2d ed. Greifswald, 1922); Palyi, Der Streit um die Staatliche Theorie des Geldes (Munich and Leipzig, 1922) (also in Schmoller's Jahrbuch, 45. Jahrgang). Also see the acute investigations of G. M. Verrijn Stuart, Inleiding tot de Leer der Waardevastheid van het Geld ('s Gravenhage, 1919).

Part I, Chapter 1

1. See Wicksell, Über Wert, Kapital und Rente (Jena, 1893; London, 1933), pp. 50 f.

2. The conclusion that indirect exchange is necessary in the majority of cases is extremely obvious. As we should expect, it is among the earliest discoveries of economics. We find it clearly expressed in the famous fragment of the Pandects of Paulus: "Quia non semper nec facile concurrebat, ut, cum tu haberas, quod ego desiderarem, invicem haberem, quod tu accipere velles" (Paulus, lib. 33 ad edictum 1.I pr. D. de contr. empt. 18, I).

Schumpeter is surely mistaken in thinking that the necessity for money can be proved solely from the assumption of indirect exchange (see his Wesen und Hauptinhalt der theoretischen Nationalökonomie [Leipzig, 1908], pp. 273 ff.). On this point, cf. Weiss, Die moderne Tendenz in der Lehre vom Geldwert, Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung, vol. 19, pp. 518 ff.

3. See Menger, Untersuchungen über die Methode der Sozialwissenschaften und der politischen Okonomie insbesondere (Leipzig, 1883), pp. 172 ff.; Grundsätze der Volkswirtschaftslehre, 2d ed. (Vienna, 1923), pp. 247 ff.

4. See Menger, Grundsätze, pp. 278 ff.

5. See Nicholson, A Treatise on Money and Essays on Present Monetary Problems (Edinburgh, 1888), pp. 22 ff.; Laughlin, The Principles of Money (London, 1903), pp. 22 f.

6. Cf. Menger, Grundsätze, pp. 284 ff.

7. That is, apart from the exceptional propensity to hoard gold, silver, and foreign bills, encouraged by inflation and the laws enacted to further it.

8. Knies in particular (Geld und Kredit, 2d ed. [Berlin, 1885], vol. 1, pp. 233 ff.) has laid stress upon the function of money as interlocal transmitter of value.

9. Cf. Menger, Grundsätze, pp. 282 f.

Part I, Chapter 2

10. See Simmel, Philosophie des Geldes, 2d ed. (Leipzig, 1907), p. 35; Schumpeter, Wesen und Hauptinhalt der theoretischen Nationalökonomie (Leipzig, 1908), p. 50.

11. Cf. Böhm-Bawerk, "Grundzüge der Theorie des wirtschaftlichen Güterwertes," Jahrbücher für Nationalökonomie und Statistik (1886), New Series, vol. 13, p. 48.

12. See Cuhel, Zur Lehre von den Bedürfnissen (Innsbruck, 1906), pp. 186 ff.; Weiss, Die moderne Tendenz in der Lehre vom Geldwert, Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung, vol. 19, pp. 532 ff. In the last edition of his masterpiece Capital and Interest, revised by himself, Böhm-Bawerk endeavored to refute Cuhel's criticism, but did not succeed in putting forward any new considerations that could help toward a solution of the problem (see Kapital und Kapitalzins, 3d ed. [Innsbruck, 1909-12], pp. 331 ff. Exkurse, pp. 280 ff.).

13. See Fisher,Mathematical Investigations in the Theory of Value and Prices, Transactions of the Connecticut Academy (New Haven, 1892), vol. 9, pp. 14 ff.

14. See also Weiss, op. cit., p. 538.

15. Cf. Schumpeter,op. cit., p. 290.

16. Cf. further Weiss,op. cit., pp. 534 ff.

17. See also Clark, Essentials of Economic Theory (New York, 1907), p. 41. In the first German edition of the present work, the above argument contained two further sentences that summarized in an inadequate fashion the results of investigation into the problem of total value. In deference to certain criticisms of C. A. Verrijn Stuart (Die Grundlagen der Volkswirtschaft [Jena, 1923], p. 115), they were omitted from the second edition.

18. On the indispensability of money for economic calculation, see my book Die Gemeinwirtschaft: Untersuchungen über den Sozialismus(Jena, 1922), pp. 100 ff.

19. [This chapter deals with technical matters which may present difficulty to readers unacquainted with general economic theory. It may be omitted on a first reading, but it is essential to complete understanding of certain issues, such as the index-number problem, which are dealt with later.—Editor.]

Part I, Chapter 3

20. See Böhm-Bawerk, Rechte und Verhältnisse (Innsbruck, 1881), pp. 120 ff.

21. Wagner, Beiträge zur Lehre von den Banken (Leipzig, 1857), pp. 34 ff.

22. For instance, Helfferich, Das Geld, 6th ed. (Leipzig, 1923), pp. 267 ff.; English trans., Money (London, 1927), pp. 284 ff.

23. See Laughlin, The Principles of Money (London, 1903), pp. 516 ff.

24. See Kalkmann, Englands Übergang zur Goldwährung im 18. Jahrhundert (Strassburg, 1895), pp. 64 ff.; Schmoller, "Über die Ausbildung einer richtigen Scheidemünzpolitik vom 14. bis zum 19. Jahrhundert," Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich 24 (1900): 1247-74; Helfferich, Studien über Geld und Bankwessen (Berlin, 1900), pp. 1-37.

25. On the concepts of commodity money, credit money, and fiat money, see sec. 3 of this chap.

26. On the nature of token coinage, see Say, Cours complet d'économie politique pratique, 3d ed. (Paris, 1852), vol, 1, p. 408; and Wagner, Theoretische Sozialökonomik (Leipzig, 1909), Part II pp. 504 ff. Very instructive discussions are to be found in the memoranda and debates that preceded the Belgian Token Coinage Act of 1860. In the memorandum of Pirmez, the nature of modern convertible token coins is characterized as follows: "With this property (of convertibility) the coins are no longer merely coins; they become claims, promises to pay. The holder no longer has a mere property right to the coin itself [jus in re]; he has a claim against the state to the amount of the nominal value of the coin [jus ad rem], a right which he can exercise at any moment by demanding its conversion. Token coins cease to be money and become a credit instrument [une institution de crédit], banknotes inscribed on pieces of metal ..." (see Loi décrétant la fabrication d'une monnaie d'appoint ... précédée des notes sur la monnaie de billon en Belgique ainsi que la discussion de la loi à la Chambre des Représentants [Brussels, 1860], p. 50).

27. The silver gulden in Austria-Hungary held the same position as the silver thaler in Germany from 1873 to 1907. It was legal tender, but economically a claim to money, since the bank-of-issue in fact always cashed it on demand.

28. See my articles "Das Problem gesetzlicher Aufnahme der Barzahlungen in Österreich-Ungarn," Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich 33 (1909): 985-1037; "Zum Problem gesetzlicher Aufnahme der Barzahlungen in Österreich-Ungarn," ibid. 34 (1910): 1877-84; "The Foreign Exchange Policy of the Austro-Hungarian Bank," Economic Journal 19 (1909): 202-11; "Das vierte Privilegium der Österreichisch-Ungarischen Bank," Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung 21 (1922): 611-24.

29. See esp. Hammer, Die Hauptprinzipien des Geld-und Währungswesens und die Lösung der Valutafrage (Vienna, 1891), pp. 7 ff.; Gesell, Die Anpassung des Geldes und seiner Verwaltung an die Bedürfnisse des modernen Verkehres (Buenos Aires, 1897), pp. 21 ff.; Knapp, Staatliche Theorie des Geldes, 3d ed. (Munich, 1921), pp. 20 ff.

30. See Luschin, Allgemeine Münzkunde und Geldgeschichte des Mittelalters und der neureren Zeit (Munich, 1904), P. 215; Babelon, La théorie féodale de la monnaie (Extrait des mémoires de l'Académie des Inscriptions et Belles-Lettres, vol. 38, Part I [Paris, 1908], p. 35).

31. For important references, see Babelon, op. cit., p. 35.

32. See Seidler, "Die Schwankungen des Geldwertes und die juristische Lehre von dem Inhalt der Geldschulden," Jahrbücher für Nationalökonomie und Statistik (1894), 3d. Series, vol. 7, p. 688.

33. For earlier conditions in Russia, see Gelesnoff, Grundzüge der Volkswirtschaftslehre, trans. into German by Altschul (Leipzig, 1918), p. 357.

34. See Luschin, op. cit., pp. 221 f.

35. Ibid., p. 155; Endemann, Studien in der romanisch-kanonistischen Wirtschafts-und Rechtslehre bis gegen Ende des 17. Jahrhunderts (Berlin, 1874), vol. 1, pp. 180 ff.

36. Chevalier, Cours d'économie politique, III., La monnaie (Paris, 1850), pp. 21 ff; Goldschmidt, Handbuch des Handelsrechts (Erlangen, 1868), vol. 1, Part II, pp. 1073 ff.

Part I, Chapter 4

37. Knapp, Staatliche Theorie des Geldes (3d. ed., 1921); trans. into English by H. M. Lucas and J. Bonar as The State Théory of Money (London, 1924).

38. See Helfferich, Das Geld, 6th ed. (Leipzig, 1923), p. 294; English trans., Money (London, 1927), p. 312.

39. See Helfferich, Die Reform des deutschen Geldwesens nach der Gründung des Reiches (Leipzig, 1898), vol. 1, pp. 307 ff; Lotz, Geschichte und Kritik des deutschen Bankgesetzes vom 14. März 1875 (Leipzig, 1888), pp. 137 ff.

40. See Subercaseaux, Essai sur la nature du papier monnaie (Paris, 1909), pp. 5 ff.

Part I, Chapter 5

41. See Menger, Grundsätze der Volkswirtschaftslehre, 2d ed. (Vienna, 1923), pp. 20 ff.; Wieser, Über den Ursprung und die Hauptgesetze des wirtschaftlichen Wertes (Vienna, 1884), pp. 42 ff.

42. Roscher, System der Volkswirtschaft, ed. Pöhlmann, 24th ed. (Stuttgart, 1906), vol. 1, p. 123.

43. See Knies, Geld und Kredit, 2d ed. (Berlin, 1885), vol. 1, pp. 20 ff.

44. See Helfferich, Das Geld, 6th ed. (Leipzig, 1923), pp. 264 f.; Money (London, 1924),

45. E.g. Philippovich, Grundriss der politischen Ökonomie 1st-3d eds. (Tübingen, 1907), vol. 2; Wagner, Theoretische Sozialökonomik (Leipzig, 1909), vol. 2, Part 2 p. 1.

46. The older meaning, at least the only earlier meaning in literature, appears to have been that relating to the sale of goods. It is remarkable that even Grimm's Dictionary, vol. 12, published in 1891, contains no mention of the meaning relating to transportation.

47. See J. S. Mill, Principles of Political Economy (London, 1867), p. 16; Böhm-Bawerk, Kapital und Kapitalzins, pp. 10 ff.

48. Wieser, Über den Ursprung und die Hauptgesetze des wirtschaftlichen Wertes, p. 47. See also Böhm-Bawerk, op. cit., pp. 131 f.; Clark, The Distribution of Wealth (New York, 1908), p. 11.

49. Böhm-Bawerk, op. cit., Part II pp. 131 ff. See also, on the historical aspect, Jacoby, Der Streit um den Kapitalsbegriff (Jena, 1908), pp. 90 ff; Spiethoff, "Die Lehre vom Kapital," Schmoller-Festschrift Die Entwicklung der deutschen Volkswirtschaftslehre im 19. Jahrhundert (Leipzig, 1908), vol. 4, p. 26.

50. See Jacoby, op. cit., pp. 59 f.

51. See Böhm-Bawerk, op. cit., p. 125 n.

52. Ibid., p. 132 n.

53. Böhm-Bawerk, Rechte und Verhältnisse, pp. 36 ff.

54. Smith, The Wealth of Nations, Cannan's ed. (London, 1930).

55. This is true even bearing in mind the discussions of Menger and Clark. But in any case, an investigation, both of this matter and of the problems dealt with in part 3, chap. 19, which started from Menger's or Clark's capital concept would lead eventually to the same result as one based on Böhm-Bawerk's definition.

56. See Böhm-Bawerk, Kapital und Kapitalzins, pp. 54 f.

57. I, 3, 23.

58. See Böhm-Bawerk, Kapital und Kapitalzins, Part I, pp. 16 ff., Part II, pp. 23 ff.

59. Ibid., Part II pp. 54 f., 130 ff.

Part I, Chapter 6

60. On the history of such ideas, see Hildebrand, Die Nationalökonomie der Gegenwart und Zunkunft (Frankfurt, 1848), pp. 118 ff.; Roscher, System der Volkswirtschaft, ed. Pöhlmann, 24th ed. (Stuttgart, 1906), vol. 1, pp. 345 f.; Marx, Das Kapital, 7th ed. (Hamburg, 1914), vol. 1, pp. 95 f. n.

61. More, Utopia.

62. See Marx, Zur Kritik der politischen Ökonomie, ed. Kautsky (Stuttgart, 1897), pp. 70 if.; Knies, Geld und Kredit, 2d ed. (Berlin, 1885), vol. 1, pp. 239 ff.; Aucuy, Les systèmes socialistes d'Éxchange (Paris, 1908), pp. 114 ff.

63. See the three memoranda published in 1889 in Brussels by Solvay under the title La monnaie et le Compte, and also his Gesellschaftlicher Comptabilismus (Brussels, 1897). Solvay's theories also contain various other fundamental errors.

Part II, Chapter 7

1. See Böhm-Bawerk, Kapital und Kapitalzins, pp. 211 ff.

2. See Walsh, The Fundamental Problem in Monetary Science (New York, 1903), p. 11; and in like manner, Spiethoff, "Die Quantitätstheorie insbesondere in ihrer Verwertbarkeit als Haussetheorie," Festgaben für Adolf Wagner (Leipzig, 1905), p. 256.

3. See Rau, Grundsätze der Volkswirtschaftslehre, 6th ed. (Leipzig, 1855), p. 80.

4. See Böhm-Bawerk, op. cit., Part II, p. 275. And similarly in Wieser, Der natürliche Wert, p. 45; "Der Geldwert und seine Veränderungen," Schriften des Vereins für Sozialpolitik 132: 507.

5. See Böhm-Bawerk, op. cit., Part II, pp. 273 ff.; Schumpeter, Wesen und Hauptinhalt der theoretischen Nationalökonomie (Leipzig, 1908), p. 108.

6. Wieser, Der natürliche Wert, p. 46.

7. Ibid., p. 52.

8. Böhm-Bawerk, op cit., Part II, pp. 214 f.

9. See Helfferich, Das Geld, 6th ed. (Leipzig, 1923), pp. 301 f.

10. Thus Schumpeter, op. cit., p. 109.

11. See Böhm-Bawerk, op. cit., Part II, p. 217.

12. See Wieser, "Der Geldwert und seine geschichtlichen Veränderungen," Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung 13 (1904): 45.

13. Thus even as late as Menger, Grundsätze der Volkswirtschaftslehre (Vienna, 1871), p. 259 n; and also Knies, Geld und Kredit (Berlin, 1885), vol. 1, p. 323.

14. See Simmel, Philosophie des Geldes, 2d ed. (Leipzig, 1907), p. 130.

15. But, as a general rule, objects of art, jewelry and other things made of precious metal should not be regarded as constituting part of the stock of metal which performs the function

of commodity money. They are goods of the first order, in relation to which the bullion or coined metal must be regarded as goods of superior orders.

16. See Wieser, "Der Geldwert und seine geschichtlichen Veränderungen," p. 46.

17. More than two hundred years ago, John Law, far ahead of his time and with an insight amounting to genius, had seized upon this truth: "Il est raisonnable de penser que l'argent s'échangeait sur le pied de ce qu'il était évalué pour les usages, comme métal, et q'on le donnait comme monnaie dans les échanges à raison de sa valeur. Le nouvel usage de la monnaie, auquel l'argent fut appliqué, dut ajouter à sa valeur, parce que, comme monnaie, obviait aux désavantages et aux inconvénients de l'échange; et conséquemment les demandes d'argent venant à s'augmenter, il reçut une valeur additionnelle, égale à l'accroissement de la demande occasionnée par son usage comme monnaie. Et cette valeur additionnelle n'est pas plus imaginaire que la valeur que l'argent avait dans les échanges comme métal, parce que telle ou telle valeur dérivait de son application à tels ou tels usages, et quelle était plus grande ou moindre, suivant les demandes d'argent comme métal, en proportion de sa quantité. Le valeur additionnelle que l'argent reçut de son usage comme monnaie provient de ses qualités, qui le rendaient propre a cet usage; et cette valeur fut en raison de la demande additionnelle occasionnée par son usage comme monnaie. Si l'une et l'autre de ces valeurs sont imaginaires, alors toutes les valeurs le sont; car aucune chose n'a de valeur que par l'usage auquel on l'applique, et à raison des demandes qu'on en fait, proportionellement à sa quantité" (Considerations sur le numéraire et le commerce, ed. Daire, Économistes financiers du XVIIIe siécle, 2nd. ed. [Paris, 1851]), pp. 447 f. See further Walras, Théorie de la monnaie (Lausanne, 1886), p. 40; Knies, op. cit., vol. 1, p. 324. Objective theories of value are unable to comprehend this fundamental principle of the theory of the value of money. This is best shown by the lack of comprehension with which Marx confronts the arguments of Law cited above (see Marx, Das Kapital, 7th ed. (Hamburg, 1914) vol. 1, p. 56, n. 46; trans. E. and C. Paul into English).

18. See Heyn, Irrtümer auf dem Gebiete des Geldwesens (Berlin, 1900), p. 3; Simmel, op. cit., pp. 116 ff.

19. Jevons, Money and the Mechanism of Exchange, 13th ed. (London, 1902), pp. 49 f.

Part II, Chapter 8

20. See pp. 121-22 above. Also Böhm-Bawerk, Kapital und Kapitalzins, Part II, p. 274; Wieser, Der natürliche Wert, p. 46. (Eng. trans. The Theory of Natural Value.)

21. See Wieser, "Der Geldwert und seine Veränderungen," Schriften des Vereins für Sozialpolitik. 132:513 ff.

22. See Knies, Geld und Kredit (Berlin, 1885), vol. 1, p. 324.

23. Thus Locke, Some Considerations of the Consequences of the Lowering of Interest and Raising the Value of Money, 2d ed. (London, 1696), p. 31.

24. See Subercaseaux, Essai sur la nature du papier monnaie (Paris, 1909), pp. 17 f.

25. See Simmel, Philosophie des Geldes, 2d ed. (Leipzig, 1907), pp. 115 f.; but, above all, Wieser, "Der Geldwert und seine Veränderungen," p. 513.

26. See Schmoller, Grundriss der allgemeinen Volkswirtschaftslehre (Leipzig, 1902), vol. 2, p. 110.

27. See Zwiedineck, "Kritisches und Positives zur Preislehre," Zeitschrift für die gesamte Staatswissenschaft, Vol. 65, pp. 200 ff.

28. See Wieser, "Der Geldwert und seine Veränderungen," p. 513.

29. See Senior, Three Lectures on the Value of Money (London, 1840; 1931), pp. 1 ff.; Three Lectures on the Cost of Obtaining Money (London, 1830; 1931), pp. 1 ff.

30. See Davanzati, Lezioni delle monete, 1588 (in Scrittori classici italiani di economia politica, Parte Antica (Milan, 1804), vol. 2, p. 32. Locke and, above all, Montesquieu (De l'Ësprit des lois, edition Touquet [Paris, 1821], vol. 2, pp. 458 f.) share this view. See Willis, "The History and Present Application of the Quantity Theory," Journal of Political Economy 4 (1896): 419 ff.

31. See Zuckerkandl, Zur Theorie des Preises (Leipzig, 1889), p. 124.

32. See Wieser, "Der Geldwert und seine Veränderungen," p. 514.

33. See Carver, "The Value of the Money Unit," Quarterly Journal of Economics 11 (1897): 429 f.

34. See Kinley, Money (New York, 1909), pp. 123 ff.

35. See Walras, Théorie de la Monnaie (Lausanne, 1886), pp. 25 ff.

36. See Kemmerer, Money and Credit Instruments in Their Relation to General Prices (New York, 1907), pp. 11 ff.

37. See Wieser, "Der Geldwert und seine Veränderungen," pp. 514 ff.

38. [See p. 146 n. H.E.B.]

39. See Wicksell, Geldzins und Güterpreise (Jena, 1898), pp. iv ff, 16 ff.

40. Ibid., p. 35.

41. See Helfferich, Das Geld, 6th ed. (Leipzig, 1923), p. 577.

42. Ibid., p. 578.

43. Dr. B. M. Anderson, pp. 100-110 of his excellent work The Value of Money (New York, 1917), has objected to the theory set forth above that instead of a logical analysis it provides merely a temporal regressus. Nevertheless, all the acute objections that he manages to bring forward are directed only against the argument that finds a historical component in the exchange ratios subsisting between commodities, an argument with which I also [see pp. 133 ff. above] am in definite disagreement. But Dr. Anderson recognizes the logical foundation of my theory when he declares, "I shall maintain that value from some source other than the monetary employment is an essential precondition of the monetary employment" (p. 126).

44. See Menger, Grundsätze der Volkswirtschaftslehre (Vienna, 1923), pp. 304 ff. [In the German edition of this book, the above paragraph was followed by an explanation that German writers, following Menger, usually refer to "the question of the nature and extent of the influence upon the exchange ratios between money and commodities exerted by variations in those determinants of prices that lie on the monetary side" as the problem of the innere objektive Tauschwert of money, and to "those concerned with variations in the objective exchange value of money throughout time and space in general" as the problem of its äussere objektive Tauschwert. Since this distinction has not been usual in English terminology, it has been omitted from the present version; and, in what follows, wherever "the objective exchange value of money" is referred to, it is the innere exchange value that is meant unless the contrary is explicitly stated. H.E.B.]

45. See Wieser, Über den Ursprung und die Hauptgesetze des wirtschaftlichen Wertes, op. cit., pp. iii.

46. See Laughlin, The Principles of Money (London, 1903), pp. 513 f.

47. Ibid., pp. 530 f.

48. Ibid., pp. 531 ff.

49. See Zuckerkandl, op. cit., pp. 123 ff.

50. See Mill, Principles of Political Economy (London, 1867), p. 299.

51. Cf. Marshall, before the Indian Currency Committee, "Report" (London, 1898—99; Q. 11759), in Official Papers (London, 1926), p. 267.

52. See Menger, op. cit., pp. 325 ff.; also Helfferich, op. cit., pp. 500 ff.

53. See Appendix B.

54. Examination of the relationship of this supposition to the doctrine of the "purely metallic currency" as expounded by the Currency School would necessitate a discussion of the criticism that has been leveled at it by the Banking School; but certain remarks in the third part of the present work on fiduciary media and the clearing system will fill the gap left above.

55. It is remarkable that even investigators who otherwise take their stand upon the subjective theory of value have been able to fall into this error. So, for example, Fisher and Brown, The Purchasing Power of Money (New York, 1911), pp. 8 ff.

56. See Wieser, "Der Geldwert und seine Veränderungen," pp. 515 ff.

57. See Hume, Essays, ed. Frowde (London), pp. 294 ff.; Mill, op. cit., pp. 298 ff.; Cairnes, Essays in Political Economy, Theoretical and Applied (London, 1873), pp. 57 ff.; Spiethoff, "Die Quantitätstheorie insbesondere in ihrer Verwertbarkeit als Haussetheorie," Festgaben für Adolf Wagner (Leipzig, 1905), pp. 250 ff.

58. Hume, op. cit., p. 307

59. Mill, op. cit., p. 299.

60. See Conant, "What Determines the Value of Money?" Quarterly Journal of Economics 18 (1904): 559 ff.

61. See Fisher and Brown, op. cit., pp. 28 ff., 157 ff.

62. See Fullarton, On the Regulation of Currencies, 2d ed. (London, 1845), pp. 69 ff., 138 f.; Wagner, Die Geld- und Kredittheorie der Peelschen Bankakte (Vienna, 1862), pp. 97 ff.

63. Elsewhere, explicitly as well. See Fullarton, op. cit., pp. 57 f.; Wagner, op. cit., p. 70.

64. See also Knies, Geld und Kredit (Berlin, 1876), vol. 2, 1st half, pp. 284 ff.

65. See Fullarton, op. cit., p. 71.

66. See Diehl, Sozialwissenschaftliche Erläuterungen zu David Ricardos Grundsätzen der Volkswirtschaft und Besteuerung, 3d ed. (Leipzig, 1922), Part 2, p. 230.

67. See Spiethoff, op. cit., pp. 263 ff.; Kemmerer, op. cit., pp. 67 ff.; Mill, op. cit., pp, 316 ff.

68. See pp. 336 ff. below.

69. See White, Money and Banking Illustrated by American History (Boston, 1895), pp. 166 ff.

70. See Wagner, Theoretische Sozialökonomik (Leipzig, 1909), vol. 2, p, 245.

71. See Wieser, "Der Geldwert und seine geschichtlichen Veränderungen," pp. 57 ff.; "Der Geldwert und seine Veränderungen," pp. 527 ff.; "Theorie der gesellschaftlichen Wirtschaft," in Grundriss der Sozialökonomik (Tübingen, 1914), Part I pp. 327 ff.

72. See also my article "Die allgemeine Teuerung im Lichte der theoretischen Nationalalökonomie, Archiv für Sozialwissenschaft 37: 563 ff.

73. Menger, Beiträge zur Währungsfrage in Österreich-Ungarn (Jena, 1892), pp. 53 ff.

74. For example, the letter postage rates of the member countries of the International Postal Union.

75. Jahrbücher für Nationalökonomie und Statistik, 3d Series, vol. 47, pp. 86-93.

76. See pp. 148 ff. above.

Part II, Chapter 9

77. See pp. 97 above.

78. See Senior, Three Lectures on the Cost of Obtaining Money, pp. 1 ff.

79. See Wieser, "Der Geldwert und seine Veränderungen," Schriften des Vereins für Sozialpolitik 132: 531 f.

Part II, Chapter 10

80. The theory put forward above, which comes from Ricardo, is advocated with particular forcefulness nowadays by Cassel, who uses the name purchasing-power parity for the static exchange ratio. See Cassel, Money and Foreign Exchange After 1914 (London, 1922), p. 181 f.

81. See Senior, Three Lectures on the Transmission of the Precious Metals from Country to Country and the Mercantile Theory of Wealth (London, 1828), pp. 5 ff.

82. See Ricardo, "Principles of Political Economy and Taxation," in Works, ed. McCulloch, 2d ed. (London, 1852), pp. 213 ff.; Hertzka, Das Wesen des Geldes (Leipzig, 1887), pp. 42 ff.; Kinley, Money (New York, 1909), pp. 78 ff.; Wieser, "Der Geldwert und seine Veränderungen," Schriften des Vereins für Sozialpolitik 132: 530 ff.

83. Transitory displacements are possible, if foreign money is acquired in the speculative anticipation of its appreciating.

Part II, Chapter 11

84. [Following Menger, we should call the first of these two problems the problem of the measurability of the äussere objective exchange value of money, the second that of the measurability of its innere objective exchange value. See also p. 146 n. H.E.B.]

85. See Menger, Grundsätze der Volkswirtschaftslehre, 2d ed. (Vienna, 1923), pp. 298 ff.

86. On Falkner's method, see Laughlin, The Principles of Money (London, 1903), pp. 213—21; Kinley, Money (New York, 1909), pp. 253 ff.

87. See Wieser, "Uber die Messung der Veränderungen des Geldwerts," Schriften des Vereins für Sozialpolitik 132 (Leipzig, 1910): 544 ff. Joseph Lowe seems to have made a similar proposal as early as 1822; on this, see Walsh, The Measurement of General Exchange Value (New York, 1901), p. 84.

88. See Weiss, Die moderne Tendenz in der Lehre vom Geldwert, Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung, vol. 19, p. 546.

89. See also pp. 243 ff. below.

Part II, Chapter 12

90. See Dernburg, Pandekten, 6th ed. (Berlin, 1900), vol. 1, p. 84. On the fact that one of the chief characteristics of a fiction is the explicit consciousness of its fictitiousness, see also Vaihinger, Die Philosophie des Als ob, 6th ed. (Leipzig, 1920), p. 173; English trans., The Philosophy of "As If" (London: Kegan Paul, 1924).

91. L. 80, Dig. de solutionibus et liberationibus 46, 3. Pomponius libro quarto ad Quintum Mucium. See further Seidler, "Die Schwankungen des Geldwertes und die juristische Lehre von dem Inhalt der Geldschulden," Jahrbücher für Nationalökonomie und Statistik (1894), 3d series, vol. 7, pp. 685 ff.; Endemann, Studien in der romanische-kanonistischen Wirtschafts- und Rechtslehre bis gegen Ende des 17 Jahrhunderts (Berlin, 1874), vol. 2, p. 173.

92. In a review of the first edition (Die Neue Zeit, 30th year, vol. 2, p. 1024-1027), Hilferding criticized the above arguments as "merely funny." Perhaps it is demanding too much to expect this detached sense of humor to be shared by those classes of the German nation who have suffered in consequence of the depreciation of the mark. Yet only a year or two ago even these do not appear to have understood the problem any better. Fisher (Hearings Before the Committee on Banking and Currency of the House of Representatives, 67th Cong., 4th sess., on H.R. 1788 [Washington, D.C., 1923], pp. 5 ff., 25 ff.) gives typical illustrations. It was certainly an evil fate for Germany that its monetary and economic policy in recent years should have been in the hands of men like Hilferding and Havenstein, who were not qualified even for dealing with the depreciation of the mark in relation to gold.

93. See Knies, Geld und Kredit, (Berlin, 1876), vol. 2, Part I, pp. 105 ff.; Fisher, The Rate of Interest (New York, 1907), pp. 77 ff., 257 ff., 327 ff., 356 ff.

94. See Clark, Essentials of Economic Theory (New York, 1907), pp. 541 ff.

95. See Walsh, The Measurement of General Exchange Value (New York, 1901), pp. 80 ff.; Zi&zbreve;ek, Die statistischen Mittelwerte (Leipzig, 1908), pp. 183 ff.

96. See Mügel, Geldentwertung und Gesetzgebung (Berlin, 1923), p. 24.

97. [It should be remembered that all this was written in 1924. H.E.B.]

98. At Vienna in March 1892 at the sessions of the Currency Inquiry Commission, which was appointed in preparation for the regulation of the Austrian currency, Carl Menger remarked: "I should like to add that not only legislators, but all of us in our everyday life, are in the habit of disregarding the fluctuations in the purchasing power of money. Even such distinguished bankers as yourselves, gentlemen, draw up your balance sheet at the end of the year without inquiring whether by any chance the sum of money representing the share capital has gained or lost in purchasing power." These remarks of Menger's were not understood by the director of the Bodenkreditanstalt, Theodor von Taussig, the most outstanding of all Austrian bankers. He replied: "A balance sheet is a balancing of the property or assets of a company or individual against its liabilities, both expressed in terms of the accepted measure of value or monetary standard, that is, for Austria in gulden. Now I cannot see how, when we are thus expressing property and indebtedness in terms of the standard (which we have assumed to be homogeneous), we are to take account of variations in the standard of measurement instead of taking account of variations in the object to be measured, as is customary." Taussig completely failed to see that the point at issue concerned the estimation of the value of goods and the amount of depreciation to be written off, and not the balancing of monetary claims and monetary obligations, or that a profit and loss account, if it is not to be hopelessly inexact, must take account of variations in the value of money. Menger had no occasion to raise this point in his reply, since he was rather concerned to show that his remarks were not to be interpreted, as Taussig was inclined to interpret them, as an accusation of dishonest practice on the part of the bank directors. Menger added: "What I said was merely that all of us, not only the directors of the banks (I said even such men as are at the head of the banks), make the mistake of not taking account in everyday life of changes in the value of money" (Stenographische Protokolle über die vom 8. bis 17. März 1892 abgehaltenen Sitzungen der nach Wien einberufenen Währungs-Enquete-Kommission [Vienna, 2892], pp. 221, 257, 270).

99. See my book, Nation, Staat und Wirtschaft (Vienna, 1919), pp. 129 ff. A whole series of writings dealing with these questions has since appeared in Germany and Austria.

100. Cf. further pp. 440 ff. below.

101. See Ricardo, Letters to Malthus, ed. Bonar (Oxford, 1887), p. 10.

102. See Hume, Essays, ed. Frowde (London), p. 294 ff.

103. Auspitz and Lieben, Untersuchungen über die Theorie des Preises (Leipzig, 1889), p. 65.

Part II, Chapter 13

104. [The author uses the term Geldwertpolitik in the technical sense defined in the above section. I have reserved the term monetary policy for this special meaning. Currency policy is the term I have used to translate Währungspolitik. H.E.B.]

105. Similar interests, say those of the printers, lithographers, and the like, may play a part in the production of paper money also. Perhaps such motives had something to do with Benjamin Franklin's recommendation of an increase of paper money in his first political writing, which was published (anonymously) in Philadelphia in 1729: "A Modest Inquiry into the Nature and Necessity of a Paper Currency" (in The Works of Benjamin Franklin, ed. Sparks [Chicago, 1882], vol. 2, pp. 253-77). Shortly before—as he relates in his autobiography (ibid., vol. 1, p. 73)—he had printed the notes for New Jersey, and when his pamphlet led to the decision to issue more notes in Pennsylvania, despite the opposition of the "rich men," he got the order to print the notes. He remarks on this in his autobiography: "A very profitable job, and a great help to me. This was another advantage gained by me being able to write" (ibid., p. 92).

* [Printed Liberty Fund edition mistakenly reads "Native"—Econlib Ed.]

106. On the naive inflationary proposals that have been made in recent years by the motor-car manufacturer Henry Ford, the famous inventor Edison, and the American senator Ladd, see Yves Guyot, Les problèmes de la déflation (Paris, 1923), pp. 281 f.

107. This had been urged as early as 1740 by William Douglass in his anonymous writing A Discourse Concerning the Currencies in the British Plantations in America (Boston, 1740). See also Fisher, The Rate of Interest, p. 356.

108. See Hertzka, Währung und Handel (Vienna, 1876), p. 42.

109. See Bentham, Defense of Usury, 2d ed. (London, 1790), pp. 102 ff.

110. See Wright and Harlow, The Gemini Letters (London, 1844), pp. 51 ff.

111. See Hofmann, "Die Devalvierung des österreichischen Papiergeldes im Jahre 1811," Schriften des Vereins für Sozialpolitik 165, Part I.

112. [It should be remembered that the German edition from which the present version is translated was published in 1926. See, however, the discussion of British policy, pp. 23-26 above. H.E.B.]

113. [See p. 146 n above.]

114. Cp. pp. 251 and 262-63 above.

115. Esp. Pigou, The Economics of Welfare (London, 1921), pp. 665 ff.

Part II, Chapter 14

116. On this, see my book, Die Gemeinwirtschaft, 2d ed., (Jena, 1922), pp. 211 ff.

117. See my book, Nation, Staat und Wirtschaft (Vienna, 1919), pp. 108 ff.

118. Cassel rightly says: "A perfectly clear understanding of the monetary problem, brought about by the world war, can never be attained until officialdom's interpretation of affairs has been disproved point by point, and full light thrown on all the delusions with which the authorities attempted as long as possible to obsess the public mind" (Cassel, Money and Foreign Exchange After 1914 [London, 1922], pp. 7 ff.). See Gregory's criticism of the most

important etatistic arguments in his Foreign Exchange Before, During and After the War (London, 1921), esp. pp. 65 ff.

119. A leader of the Hungarian Soviet republic said to the author in the spring of 1919: "The paper money issued by the Soviet republic ought really to have the highest exchange rate next to the Russian money, for, through the socialization of the private property of all Hungarians, the Hungarian state has become next to Russia the richest state in the world, and consequently the most deserving of credit."

Part III, Chapter 15

1. See Bagehot, Lombard Street (London, 1906), p. 21.

2. Knies, Geld und Kredit, (Berlin, 1876), vol. 2, Part II, p. 242. See further, Weber, Depositen- und Spekulationsbanken (Leipzig, 1902), pp. 106 f.; Sayous, Les banques de depôt, les banques de crédit et les sociétés financières, 2d ed. (Paris, 1907), pp. 219 ff.; Jaffé, Das englische Bankwesen, 2d ed. (Leipzig, 1910), p. 203.

3. See Macleod, The Elements of Banking (London, 1904), p. 153.

4. See Fullarton, On the Regulation of Currencies, 2d ed. (London, 1845), p. 39; Mill, Principles of Political Economy (London, 1867), p. 314; Jaffé, op. cit., p. 175.

5. See Jaffé, op. cit., p. 153.

6. This is the "surplus profit" (Übergewinn) of the business of banking, referred to by Hermann (op. cit., pp. 500 f.).

7. As, for example, even Wicksell does (Geldzins und Güterpreise [Jena, 1898], p. 57).

8. See Torrens, The Principles and Practical Operation of Sir Robert Peel's Act of 1844 Explained and Defended, 2d ed. (London, 1857), pp. 16 ff.

9. Ibid., p. 18.

10. Since the appearance of the first edition of the present work numerous books have been published that still do not recognize the problem of circulation credit. Among the works that have grasped the nature of this problem the following should be mentioned: Schumpeter, Theorie der wirtschaftlichen Entwicklung (Leipzig, 1912), pp. 219 ff.; Schlesinger, Theorie der Geld- und Kreditwirtschaft (Munich and Leipzig, 1914), pp. 133 ff.; Hahn, Volkswirtschaftliche Theorie des Bankkredits (Tübingen, 1920), pp. 52 ff.

11. Thus Lexis, Allegemeine Volkswirtschaftslehre (Berlin, 1910) (Hinnenberg, Die Kultur der Gegenwart, section II, vol. 10, Part 1), p. 122; Lexis, Geld und Preise (Riesser-Festgabe, Berlin, 1913), pp. 83 f. Similarly, with regard to the clearinghouse business, Schumacher, Weltwirtschaftliche Studien (Leipzig, 1911), pp. 53 f. and the writings there referred to.

Part III, Chapter 16

12. See Lotz, Geschichte und Kritik des deutschen Bankgesetzes vom 14. März 1875 (Leipzig, 1888), pp. 72 f.

13. See for example on the Swiss currency reserve fund established by article 8 of the Currency Act of January 31, 1860, Altherr, Eine Betrachtung über neue Wege der schweizerischen Münzpolitik (Bern, 1908), pp. 61 ff.

14. See Knies, Geld und Kredit, (Berlin, 1876), vol. 2, Part I, pp. 268 ff.

15. See l. 21, sec. 1 D. de liberatione legata 34, 3. Terentius Clemens libro XII ad legem Juliam et Papiam.

16. See l. 1 D. der compensationibus 16, 2. Modestinus libro sexto pandectarum.

17. See Thornton, An Enquiry into the Nature and Effects of the Paper Credit of Great Britain (London, 1802), pp. 39 ff.

18. See Baird, The One Pound Note, Its History, Place and Power in Scotland, and Its Adaptability for England, 2d ed. (Edinburgh, 1901), pp. 9 ff.; Graham, The One Pound Note in the History of Banking in Great Britain, 2d ed. (Edinburgh, 1911), pp. 195 ff.; Nicholson, A Treatise on Money and Essays on Present Monetary Problems (Edinburgh, 1888), pp. 177 ff.; Jevons, Investigations in Currency and Finance (London, 1909), pp. 275 ff.

19. See Lindsay, A Gold Standard Without a Gold Coinage in England and India (Edinburgh, 1879), pp. 12 ff. I have not been able to obtain access to a second pamphlet by the same author which appeared anonymously in 1892 under the title Ricardo's Exchange Remedy.

20. See Probyn, Indian Coinage and Currency (London, 1897), pp. 1 ff.

21. See Report of the Indian Currency Committee 1898 (in Stability of International Exchange, Report on the Introduction of the Gold-Exchange Standard into China and Other Silver-using Countries submitted to the Secretary of State, October 1, 1903, by the Commission on International Exchange [Washington, D.C., 1903], Appendix G), pp. (315).; Heyn, Die indische Währungsreform, (Berlin, 1903), pp. 54 ff.; Bothe, Die indische Währungsreform seit 1893 (Stuttgart, 1906), pp. 199 ff.

22. On the fate of the Indian currency in the period of inflation during the Great War, see Spalding, Eastern Exchange, Currency and Finance, 3d ed. (London, 1920), pp. 31 ff.

23. See Conant, "The Gold Exchange Standard in the Light of Experience," The Economic Journal 19 (1909): 200.

24. In the pamphlet published in 1816, "Proposals for an Economical and Secure Currency with Observations on the Profits of the Bank of England," in Works, ed. McCulloch, 2d ed. (London, 1852), pp. 404 ff.

25. See Patterson, Der Krieg der Banken, trans. from the English by Holtzendorff (Berlin, 1867), pp. 17 ff.; Wolf, Verstaatlichung der Silberproduktion und andere Vorschläge zur Währungsfrage (Zurich, 1892), pp. 54 ff.; Wolf, "Eine international Banknote," in Zietscrift für Sozialwissenschaft (1908), vol 11, pp. 44 ff.

26. These words, written in 1911, need no addition today.

27. See De Greef, "La monnaie, le crédit et le change dans le commerce international," Revue economique internationale 4 (1911): 58 ff.

Part III, Chapter 17

28. See Smith, The Wealth of Nations, Cannan's ed. (London, 1930), vol. 2, pp. 28, 78.

29. See Ricardo, "The High Price of Bullion a Proof of the Depredation of Bank Notes," in Works, ed. McCulloch, 2d ed. (London, 1852), pp. 263 ff.; "Proposals for an Economical and Secure Currency" in ibid., pp. 397 ff.; see pp. 324-25 above and 467-68 below.

30. On the question of the dependence of economic fluctuations on credit policy, see pp. 445 f. below.

31. See Jevons, Investigations in Currency and Finance, pp. 8, 151 ff.; Palgrave, Bank Rate and the Money Market in England, France, Germany, Holland and Belgium 1844-1900 (London, 1903), pp. 106 ff.; 138; J. Laughlin, The Principles of Money (London, 1903), pp. 409 ff.

32. See Spiethoff, "Die Quantitätstheorie insbesondere in ihrer Verwertbarkeit als Haussetheorie," Festgaben für Adolf Wagner (Leipzig, 1905), pp. 263 f.

33. See Helfferich, Studien über Geld- und Bankwesen (Berlin, 1900), pp. 151 f.; Schumacher, Weltwirtschaftliche Studien (Leipzig, 1911), pp. 5 ff.

34. See White, An Elastic Currency (New York, 1893), p. 4.

35. See pp. 173 ff. above.

36. See Tooke, An Inquiry into the Currency Principle (London, 1844), pp. 60 ff.; 122 f.; Fullarton, On the Regulation of Currencies, 2d ed. (London, 1845), pp, 82 ff.; Wilson, Capital, Currency and Banking (London, 1847), pp. 67 ff.; Mill, Principles of Political Economy (London, 1867), pp. 395 ff.; Wagner, Geld- und Kredittheorie der Peelschen Bankakte (Vienna, 1862), pp. 135 ff. On Mill's lack of consistency in this question, see Wicksell, Geldzins und Güterpreise (Jena, 1898), pp. 78 f.

37. See Laughlin, The Principles of Money (London, 1903), p. 412.

38. See Wicksell, op. cit., p. v.

39. See Fullarton, op. cit., p. 64.

40. See Schumacher, op. cit., pp. 122 f.

41. See Prion, Das deutsche Wechseldiskontgeschäft (Leipzig, 1907), pp. 120 ff., 291 ff.

42. Part of the rediscounting done at the Reichsbank by the private banks shortly before the critical days of settlement is done not so much because the banks are short of capital but because they desire to pass on nearly matured bills to be called in by the Reichsbank, which is able to perform this task more cheaply than they are, thanks to its extensive network of branches. See ibid., pp. 138 ff.

Part III, Chapter 18

43. See Ricardo, "Proposals," in Works, ed. McCulloch, 2d ed. (London, 1852), p. 406; Walras, Études d'économie politique appliquée (Lausanne, 1898), pp. 365 f.

44. See for example, Tellkampf, Die Prinzipien des Geld- und Bankwesens (Berlin, 1867), pp. 181 ff.; Erfordernis voller Metalldeckung der Banknoten (Berlin, 1873), pp. 23 ff.; Geyer, Theorie und Praxis des Zettelbankwesens, 2d ed. (Munich, 1874), p. 227.

45. See Hepburn, History of Coinage and Currency in the United States (New York, 1903), p. 418.

46. See Dunbar, Chapters on the Theory and History of Banking, 2d ed. (New York, 1907), P. 99.

47. See Kiga, Das Bankwesen Japans, Leipziger Inaug. Diss., p. 9.

48. See Oppenheim, Die Natur des Geldes (Mainz, 1855), pp. 241 f.

49. This example assumes the circumstances that existed before 1914.

50. See pp. 296 ff. But the fact is often ignored that this "principle of the banking adequate cover" is valid not only for banks but similarly for all other undertakings. See, for example, Schulze-Gaevernitz, "Die deutsche Kreditbank," Grundriss der Sozialökonomik, Part V, section 2, pp. 240 ff.

51. See Wagner, System der Zettelbankpolitik (Freiburg, 1873), pp. 240 ff.—The "golden rule" found its classical expression with regard to the business of credit banks in the famous "Note expédiée du Havre le 29 Mai 1810, à la Banque de France, par ordre de S. M. l'Empereur, et par l'entremise de M. le comte Mollien, ministre du Trésor" (I quote from the reprint in Wolowski, La Question des Banques [Paris, 1864], pp. 83-87): "Il faut qu'une banque se maintienne en état de se liquider à tout moment, d'abord, vis-à-vis des porteurs de ses billets, par la réalisation de son portefeuille, et, apres les porteurs de ses billets, viv-à-vis de ses actionnaires, par la distribution à faire entre eux de la portion du capital fourni par chacun d'eux. Pour ne jamais finir, une banque doit etre toujours prête à finir" (p. 87). All the same, Mollien had no doubt on the point that a bank that does not issue its notes

otherwise "qu'en échange de bonnes et valable lettres de change, à deux et trois mois de terme au plus" can only call in its notes from circulation "dans un espace de trois mois" (ibid., p. 84).

52. In the United States, before the reorganization of the banking system under the Federal Reserve Act, the lack of a central bank in times of crises was made up for by ad hoc organizations of the banks that were members of the clearinghouses.

53. See above, pp. 346 f.

54. See Nicholson, A Treatise on Money and Essays on Present Monetary Problems (Edinburgh, 1888), pp. 67 f.

55. See Kalkmann, "Holland's Geldwesen im 29. Jahrhundert," in Schmoller's Jahrbuch, vol. 25, pp. 2249 ff.; Witten, "Die Devisenpolitik der Nationalbank von Belgien," in ibid., vol. 42, pp. 625 ff.

Part III, Chapter 19

56. The fact that I have followed the terminology and method of attack of Böhm-Bawerk's theory of interest throughout this chapter does not imply that I am an adherent of that theory or am able to regard it as a satisfactory solution of the problem. But the present work does not afford scope for the exposition of my own views on the problem of interest; that must be reserved for a special study, which I hope will appear in the not too distant future. In such circumstances I have had no alternative but to develop my argument on the basis of Böhm-Bawerk's theory. Böhm-Bawerk's great achievement is the foundation of the work of all those who until now have dealt with the problem of interest since his time, and may well be the foundation of the work of those who will do so in the future. He was the first to clear the way that leads to understanding of the problem; he was the first to make it possible systematically to relate the problem of interest to that of the value of money.

57. See Hume, Essays, ed. Frowde (London), pp. 303 ff.; Smith, The Wealth of Nations, Cannan's ed. (London, 1930), vol. 2, pp. 243 ff.; see also J. S. Mill, Principles of Political Economy (London, 1867), pp. 296 f.

58. See, for example, Georg Schmidt, Kredit und Zins (Leipzig, 1910), pp. 38 ff.

59. The transaction is conducted by the bank selling part of its consols "for money" and buying them back immediately "on account." The on-account price is higher, because it contains a large part of the interest that is almost due; the margin between the two prices represents the compensation that the bank pays for the loan. The cost that this entails is made up for by the fact that the bank now gets a larger proportion of the lending business. See Jaffé, Das englische Bankwesen, 2d ed. (Leipzig, 1910), p. 250.

60. See, for example, Arendt, Geld—Bank—Börse (Berlin, 1907), p. 19.

61. See Gilbart, The History, Principles and Practice of Banking, rev. ed. (London, 1904), vol. 1, p. 98.

62. See Wicksell, Geldzins und Güterpreise (Jena, 1898), p. 74. Indeed, even the writers of that period do frequently deal with the problem of a change in the rate of interest; see, for example, Tooke, An Inquiry into the Currency Principle (London, 1844), p. 224.

63. See Tooke, An Inquiry into the Currency Principle (London, 1844), pp. 121 ff.; Fullarton, On the Regulation of Currencies, 2d ed. (London, 1845), pp. 82 ff.; Wilson, Capital, Currency and Banking (London, 1847), pp. 67 ff. Wagner follows the train of thought of these writers in his Die Geld- und Kredittheorie der Peelschen Bankakte, pp. 135 ff.

64. See Torrens, The Principles and Practical Operation of Sir Robert Peel's Act of 1844 Explained and Defended, 2d ed. (London, 1857), pp. 57 ff.; Overstone, Tracts and Other Publications on Metallic and Paper Currency (London, 1858), passim.

65. See Wicksell, op. cit., pp. 1 ff.

66. See Fisher, The Rate of Interest (New York, 1907), pp. 94 f.

67. See Böhm-Bawerk, Kapital und Kapitalzins, p. 622.

68. See Fisher and Brown, The Purchasing Power of Money (New York, 1911), pp. 58 ff.

69. See, for instance, the most recent literature on the German banking reform; for example, the above-cited work by Schmidt (see p. 379 n. 3). An historical study would have to examine the extent to which Law, Cieszkowski, Proudhon, Macleod, and others, are to be regarded as inventors and adherents of this doctrine.

70. See Wicksell, op. cit., pp. v ff.

71. See ibid., pp. v ff., III; also "The Influence of the Rate of Interest on Prices," Economic Journal 18 (1907): 213 ff.

72. See Wicksell, "The Influence of the Rate of Interest," p. 215.

73. See Wicksell, Geldzins und Güterpreise, pp. 104 f.

74. See Walras, Études d'économie politique appliquée (Lausanne, 1898), pp. 345 f.

75. See Böhm-Bawerk, op. cit., pp. 611 ff.

76. Ibid., pp. 151 ff.

77. The fact that the two movements occur in opposite directions, so that they cancel one another, had been emphasized by Mill (Principles, pp. 391 ff.) in order to show that the increase in the rate of interest caused by inflation would be counteracted by the circumstance that the additional quantity of notes, if issued by the banks (and the additional quantity of gold so far as it was used productively), have a reducing effect on the bank rate of interest.

78. See p. 259-60 above.

Part III, Chapter 20

79. [Some of the problems that have arisen since are referred to on pp. 23-31. H.E.B.]

80. [See editor's Introduction, pp. 21-22, above. H.E.B.]

81. See Torrens, The Principles and Practical Operation of Sir Robert Peel's Act of 1844 Explained and Defended, 2d ed. (London, 1857), pp. 8 ff.

82. See Tooke, An Inquiry into the Currency Principle (London, 1844), pp. 23 ff.

83. See Wagner, "Banknote," in Rentzsch, Handwörterbuch der Volkswirtschaftslehre (Leipzig, 1866), p. 91.

84. See Wagner, "Kredit," ibid., p. 201.

85. See Schumacher's criticism of this contradiction, Weltwirtschaftliche Studien (Leipzig, 1911), pp. 62 ff.

86. See Cannon, Clearinghouses: Their History, Methods and Administration (New York, 1900), pp. 79 ff.

87. The Federal Reserve Act has since provided the United States with a basis for issuing notes in order to allay a panic.

88. See Sartorious von Waltershausen, Das volkswirtschaftliche System der Kapitalanlage im Auslande (Berlin, 1907), pp. 126 ff.

89. [See pp. 21-22 above. H.E.B.]

90. See Rosendorff, "Die Goldprämienpolitik der Banque de France und ihre deutschen Lobredner," Jahrbücher für Nationalökonomie und Statistik 21 (1901): 632 ff.; Dunbar, Chapters on the Theory and History of Banking, 2d ed. (New York, 1907), pp. 147 ff.

91. See Kaufmann, Das französische Bankwesen (Tübingen, 1911), pp. 35 ff.

92. On this, see Rosendorff, op. cit., pp. 640 ff., and passages cited in the essay "Die neue Richtung in der Goldpolitik der Bank von Frankreich," Bank-Archiv. 7 (1907): (72) ff., taken from the statements of account of the Bank of France, in which the raising of the discount rate is spoken of as the "seul moyen connu de défendre l'encaisse."

93. See Landesberger, Währungssystem und Relation (Vienna, 1891), p. 104.

94. Ibid., p. 105, and Über die Goldprämienpolitik der Zettelbanken (Vienna, 1892), p. 28.

95. Even at the time when the thaler was still unlimited legal tender and so occupied position analogous to that of the French five-franc piece, the German Reichsbank never followed a gold-premium policy on the French pattern, although it was often advised to do so. This is probably to be ascribed not so much to the circumstance that the number of thalers was relatively small as to the influence of Bamberger's ideas throughout the Reich. An open break with the principles of the banking and currency reform of the period after 1870-71 was, in view of the prevailing opinion, out of the question.

96. See Koch, Der Londoner Goldverkehr (Stuttgart, 1905), p. 708.

97. Ibid., pp. 81 f.

98. See Clare, A Money Market Primer and Key to the Exchanges, 2d ed. (London, 1893), p. 22.

99. Rosendorff ("Die Goldprämienpolitik der Banque de France," p. 636) would appear to be mistaken in thinking it possible to detect a difference of principle between the procedure of the Bank of England and the Reichsbank in paying out gold and the gold-premium policy of the Bank of France. He bases his view on the argument that, whereas the latter refuses altogether to pay out French gold coins and is thus theoretically able to raise the amount of the premium indefinitely, the Bank of England and the Reichsbank, which in contrast to the Bank of France always redeem their notes at their full value in current gold coin and have never attempted to refuse to pay out gold, are able to raise the selling price of bullion only by the amount of the cost of minting and an allowance for wear and tear. Rosendorff, in arguing from the statement that the Bank of France is "theoretically" able to raise the amount of the gold-premium indefinitely, flatly contradicts what he says in the rest of his book. In fact it does not do it, quite apart from the consideration that the law forbids it also. But if it did it, then it would completely alter the character of the French monetary system. It could not be expected that the French government and the Chambers would sanction the transaction to a credit-money standard which would be involved in such a procedure.

100. Thus, in the Compte rendu for 1898 (pp. 12 f.): "Si nous nous efforçons de conserver de grandes disponibilités métalliques et de les ménager le mieux possible, nous ne devons pas non plus perdre de vue les intérêts du commerce et lui refuser les moyens de payement qu'il réclame pour les besoins les plus légitimes, c'est-à-dire pour l'approvisionnement du marché français."

101. See my article Das Problem gesetzlicher Aufnahme der Barzahlungen in Osterreich-Ungarn, p. 1017. If the Austro-Hungarian Bank were to follow the example of the Bank of France in this or some other way it would achieve an exactly opposite result to that achieved by the French institution. Like that of the Bank of France, its action would restrict not merely the efflux but also the influx of gold. In France, the creditor nation, this means something very different from what it means in Austria, the debtor nation. In France, restriction of the importation of capital (which would only exceptionally occur) is unobjectionable; in Austria, the country that is dependent on constant importation of capital from abroad, it would have quite a different effect. The fact that there was a possibility of difficulties in subsequently repatriating the capital would mean that a greater gap than otherwise would have to occur between the Viennese and the foreign rates of interest before capital would be sent to

Austria, and this would mean that the rate of interest in Austria would always be higher. The fact, on the other hand, that the export of Austrian short-term capital would also not be profitable except when there was a greater gap than otherwise between the home and foreign rates would not counteract the above disadvantage, because the question of capital exportation from Austria-Hungary to western countries very seldom arises.

102. See Koch, op. cit., p. 79; Die Reichsbank 1876-1900 (Berlin, 190l), p. 146.

103. See Obst, Banken und Bankpolitik (Leipzig, 1909), pp. 90 f.; Hertz, "Die Diskont und Devisenpolitik der österreichisch-ungarischen Bank," Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung 12 (1903): 496.

104. See Koch, op. cit., pp. 79 ff.; Hertz, op. cit., p. 521; Spitzmüller, "Valutareform und Währungsgesetzgebung," in Oesterreichischen Staatswörterbuch, 2d ed., vol. 2, p. 300.

105. See also Proebst, Die Grundlagen unseres Depositen- und Scheckwesens (Jena, 1908), pp. 1 ff.

106. It is only in very recent years that views on this point in dominant circles have begun slowly to change.

107. [The reader will remember that this was written in 1924. H.E.B.]

108. See Keynes, A Tract on Monetary Reform (London, 1923), pp. 163 ff.

109. See Kant, Werke, vol. 5, Zum ewigen Frieden (Insel-Ausgabe), pp. 661 f.

110. See Horn, Bankfreiheit (Stuttgart, 1867), pp. 376 f.

111. [It should be remembered that this was written in 1924. H.E.B.]

112. See pp. 166 f. above. Fisher particularly refers to this independence (Stabilizing the Dollar [New York, 1920], p. 90) and Anderson similarly affirms it, although in his book The Value of Money he has most severely criticized Fisher's version of the quantity theory of money. See Anderson, The Fallacy of "The Stabilized Dollar" (New York, 1920), pp. 6 f.

113. See pp. 215 ff. and 232 ff. above.

Part IV, Chapter 21

1. See Mises, Human Action (New Haven: Yale University Press, 1949), pp. 204-6.

2. See pp. 139-44 above.

3. About this problem, see Human Action, pp. 463-68.

4. See A. B. Lerner, The Economics of Control (New York, 1944), pp. 307-8.

5. See B. Ruml, "Taxes for Revenue Are Obsolete," American Affairs 8 (1946): 35-36.

6. See chap. 11 above; Human Action, pp. 55-57, 347-49.

7. Part 3 of this book is entirely devoted to the exposition of the trade-cycle theory, the doctrine that is called the monetary- or circulation-credit theory, sometimes also the Austrian theory. See also Human Action, pp. 535-83, 787-94.

8. See Keynes, The General Theory of Employment, Interest and Money (London, 1936), p. 264.

Part IV, Chapter 22

9. For the reasons that led to the establishment of such foreign-exchange equalization accounts, see Human Action, pp. 458-59.

Part IV, Chapter 23

10. About the fundamental error of this point of view, see chap. 19 above.

11. For the only exception to this rule, see next paragraph below.

12. See pp. 493-94 below.

Appendix A

13. See Endemann, Studien in der romanisch-kanonistischen Wirtschafts- und Rechtslehre bis gegen Ende des 17. Jahrhunderts (Berlin, 1874-1883), vol. 2, p. 199.

14. See Voigt, "Die staatliche Theorie des Geldes," Zeitschrift für die gesamte Staatswissenschaft 62: 318 f.

15. Bendixen, Währungspolitik und Geldtheorie im Lichte des Weltkriegs (Munich and Leipzig, 1916), p. 37 (2d ed., 1919, p. 44).

16. Dühring, Cursus der National-und Sozialökonomie, 3d ed. (Leipzig, 1892), pp. 42 ff., 401.

17. See also Palyi, Der Streit um die staatliche Theorie des Geldes (Munich and Leipzig, 1922), pp. 88 ff.

18. Knapp, Staatliche Theorie des Geldes, 3d ed. (1921), pp. 445 ff.

19. To imagine that the state theory is a juristic theory, is to be ignorant of the purpose that a juristic theory of money has to fulfill. Anybody who holds this opinion should refer to any work on the law of contract and note what questions are there dealt with in the chapter on money.

20. Knapp, op. cit., pp. 206, 214.

21. Lexis, "Papiergeld," in Handwörterbuch der Staatswissenschaften, 3d. ed., vol. 6, pp. 987 ff.

22. Schumpeter, "Das Sozialprodukt und die Rechenpfennige," Archiv für Sozialwissenschaft und Sozialpolitik 44: 635, 647 ff.

23. Ibid., pp. 665 f.

24. See above, pp. 168 ff.

25. Knapp, op. cit., p. 281; "Die Beziehungen Oesterreichs zur staatlichen Theorie des Geldes," Zeitschrift für Volkswirtschaft, &c. 17: 440.

26. Knapp, Staatliche Theorie, pp. 6 f.

27. "Alle unsere Nationalökonomen sind Metallisten," Knapp, "Über die Theorien des Geldwesens," Jahrbuch für Gesetzgebung, &c. 33: 432.

28. Knapp, "Die Währungsfrage vom Staat aus betrachtet," Jahrbuch für Gesetzgebung, &c. 41: 1528.

29. Knapp, "Über die Theorien des Geldwesens," p. 430.

30. Ibid., p. 432.

31. See also pp. 332 f. above.

32. From the pamphlet of Ricardo's referred to above it may suffice to quote the following passage only: "A well-regulated paper currency is so great an improvement in commerce that I should greatly regret if prejudice should induce us to return to a system of less utility.

The introduction of the precious metals for the purposes of money may with truth be considered as one of the most important steps toward the improvement of commerce and the arts of civilized life; but it is no less true, that, with the advancement of knowledge and science, we discover that it would be another improvement to banish them again from the employment to which, during a less enlightened period, they had been so advantageously applied" (Works, 2d ed. [London, 1852], p. 404). Thus the real appearance of Ricardo's "metallistic indignation."

33. Wieser, Über die Messung der Veränderungen des Geldwerts, p. 542.

34. Wieser, "Theorie der gesellschaftlichen Wirtschaft," Grundriss der Sozialökonomik (Tübingen, 1924), p. 316.

35. See the passages quoted on pp. 125 f. above.

36. See Knapp, Staatliche Theorie, 1st ed., pp. 5, 7.

37. See Zuckerkandl, Zur Theorie des Preises mit besonderer Berücksichtigung der geschichtlichen Entwicklung der Lehre (Leipzig, 1899), pp. 98, 115 f.

38. See Hermann, Staatswirtschaftliche Untersuchungen, 2d ed. (Munich, 1870), p. 444; Knies, Das Geld, 2d ed. (Berlin, 1885), p. 324.

39. Knapp, Staatliche Theorie, p. 5.

40. Bendixen, op. cit., p. 134.

41. See Wieser, "Theorie der gesellschaftlichen Wirtschaft," p. 317.

42. [Of which the present work is a translation. H.E.B.]

43. Philippovich, Grundriss (Tübingen, 1916), p. 275.

44. Ibid.

45. See esp. Knapp, Schriften des Vereins für Sozialpolitik, vol. 132, pp. 560 ff.

46. Knapp, Geldtheorie, staatliche in H. d. S., 3d ed.

47. Philippovich, op. cit.

48. Ibid., pp. 272 ff.

49. Lansburgh, Kriegskostendeckung (Berlin, 1915), pp. 52 ff.

50. Bortkiewicz, Frage der Reform, A. s. P. G., vol. 6, p. 98,

51. See pp. 379 ff. above.

Appendix B

52. See p. 155 above.

53. See also pp. 146 n and 247 n above.

End of Notes. Top of File Notes

Econlib Editor's Notes

Ludwig von Mises (1881-1973) first published The Theory of Money and Credit in German, in 1912. The edition presented here is that published by Liberty Fund in 1980, which was translated from the German by H. E. Batson originally in 1934, with additions in 1953. We are grateful to Bettina Bien Greaves, who holds the copyright, for permission to reprint this work on the Econlib website.

N.1
Only a few corrections of obvious typos were made for this website edition. One character substitution has been made: the ordinary character "C" has been substituted for the "checked C" in the name Cuhel.

N.2
Footnote references in the text are color coded according to authorship as follows:

14* Mises's original notes, color-coded blue in the text, are unbracketed and unlabeled in the footnote file. Also color-coded blue and unbracketed are notes in sections written by others: Batson's Appendix B, the Foreword, and Introduction.

14* [Batson's notes, color-coded gold in the text, are bracketed in the footnote file, and initialed H.E.B.]

* Occasional website (Library of Economics and Liberty) Editor's notes, color-coded red in the text, are unbracketed and indicated by asterisks without numbers in the text.

N.3

PREFACE TO THE NEW EDITION

Forty years have passed since the first German-language edition of this volume was published. In the course of these four decades the world has gone through many disasters and catastrophes. The policies that brought about these unfortunate events have also affected the nations' currency systems. Sound money gave way to progressively depreciating fiat money. All countries are today vexed by inflation and threatened by the gloomy prospect of a complete breakdown of their currencies.

P.1
There is need to realize the fact that the present state of the world and especially the present state of monetary affairs are the necessary consequences of the application of the doctrines that have got hold of the minds of our contemporaries. The great inflations of our age are not acts of God. They are man-made or, to say it bluntly, government-made. They are the offshoots of doctrines that ascribe to governments the magic power of creating wealth out of nothing and of making people happy by raising the "national income."

P.2
One of the main tasks of economics is to explode the basic inflationary fallacy that confused the thinking of authors and statesmen from the days of John Law down to those of Lord Keynes. There cannot be any question of monetary reconstruction and economic recovery as long as such fables as that of the blessing of "expansionism" form an integral part of official doctrine and guide the economic policies of the nations.

P.3
None of the arguments that economics advances against the inflationist and expansionist doctrine is likely to impress demagogues. For the demagogue does not bother about the remoter consequences of his policies. He chooses inflation and credit expansion although he knows that the boom they create is short-lived and must inevitably end in a slump. He may even boast of his neglect of the long-run effects. In the long run, he repeats, we are all dead; it is only the short run that counts.

P.4
But the question is, how long will the short run last? It seems that statesmen and politicians have considerably overrated the duration of the short run. The correct diagnosis of the present state of affairs is this: We have outlived the short run and have now to face the long-run consequences that political parties have refused to take into account. Events turned out precisely as sound economics, decried as orthodox by the neo-inflationist school, had prognosticated.

P.5
In this situation an optimist may hope that the nations will be prepared to learn what they blithely disregarded only a short time ago. It is this optimistic expectation that prompted the publishers to republish this book and the author to add to it as an epilogue an essay on monetary reconstruction (part four).

LUDWIG VON MISES
New York
June 1952

P.6

PREFACE TO THE ENGLISH EDITION

The outward guise assumed by the questions with which banking and currency policy is concerned changes from month to month and from year to year. Amid this flux, the theoretical apparatus which enables us to deal with these questions remains unaltered. In fact, the value of economics lies in its enabling us to recognize the true significance of problems, divested of their accidental trimmings. No very deep knowledge of economics is usually needed for grasping the immediate effects of a measure; but the task of economics is to foretell the remoter effects, and so to allow us to avoid such acts as attempt to remedy a present ill by sowing the seeds of a much greater ill for the future.

HP.1
Ten years have elapsed since the second German edition of the present book was published. During this period the external appearance of the currency and banking problems of the world has completely altered. But closer examination reveals that the same fundamental issues are being contested now as then. Then, England was on the way to raising the gold value of the pound once more to its prewar level. It was overlooked that prices and wages had adapted themselves to the lower value and that the reestablishment of the pound at the prewar parity was bound to lead to a fall in prices which would make the position of the entrepreneur more difficult and so increase the disproportion between actual wages and the wages that would have been paid in a free market. Of course, there were some reasons for attempting to reestablish the old parity, even despite the indubitable drawbacks of such a proceeding. The decision should have been made after due consideration of the pros and cons of such a policy. The fact that the step was taken without the public having been sufficiently informed beforehand of its inevitable drawbacks, extraordinarily strengthened the opposition to the gold standard. And yet the evils that were complained of were not due to the resumption of the gold standard, as such, but solely to the gold value of the pound having been stabilized at a higher level than corresponded to the level of prices and wages in the United Kingdom.

HP.2
From 1926 to 1929 the attention of the world was chiefly focused upon the question of American prosperity. As in all previous booms brought about by expansion of credit, it was then believed that the prosperity would last forever, and the warnings of the economists were disregarded. The turn of the tide in 1929 and the subsequent severe economic crisis were not a surprise for economists; they had foreseen them, even if they had not been able to predict the exact date of their occurrence.

HP.3
The remarkable thing in the present situation is not the fact that we have just passed through a period of credit expansion that has been followed by a period of depression, but the way in which governments have been and are reacting to these circumstances. The universal endeavor has been made, in the midst of the general fall of prices, to ward off the fall in money wages, and to employ public resources on the one hand to bolster up undertakings that would otherwise have succumbed to the crisis, and on the other hand to give an artificial stimulus to economic life by public works schemes. This has had the consequence of eliminating just those forces which in previous times of depression have eventually effected the adjustment of prices and wages to the existing circumstances and so paved the way for recovery. The unwelcome truth has been ignored that stabilization of wages must mean increasing unemployment and the perpetuation of the disproportion between prices and costs and between outputs and sales which is the symptom of a crisis.

HP.4
This attitude was dictated by purely political considerations. Gov ernments did not want to cause unrest among the masses of their wage-earning subjects. They did not dare to oppose the doctrine that regards high wages as the most important economic ideal and believes that trade-union policy and government intervention can maintain the level of wages during a period of falling prices. And governments have therefore done everything to lessen or remove entirely the pressure exerted by circumstances upon the level of wages. In order to prevent the underbidding of trade-union wages, they have given unemployment benefits to the growing masses of those out of work and they have prevented the central banks from raising the rate of interest and restricting credit and so giving free play to the purging process of the crisis.

HP.5
When governments do not feel strong enough to procure by taxation or borrowing the resources to meet what they regard as irreducible expenditure, or, alternatively, so to restrict their expenditure that they are able to make do with the revenue that they have, recourse on their part to the issue of inconvertible notes and a consequent fall in the value of money are something that has occurred more than once in European and American history. But the motive for recent experiments in depreciation has been by no means fiscal. The gold content of the monetary unit has been reduced in order to maintain the domestic wage level and price level, and in order to secure advantages for home industry against its competitors in international trade. Demands for such action are no new thing either in Europe or in America. But in all previous cases, with a few significant exceptions, those who have made these demands have not had the power to secure their fulfillment. In this case, however, Great Britain began by abandoning the old gold content of the pound. Instead of preserving its gold value by employing the customary and never-failing remedy of raising the bank rate, the government and parliament of the United Kingdom, with bank rate at four and one-half percent, preferred to stop the redemption of notes at the old legal parity and so to cause a considerable fall in the value of sterling. The object was to prevent a further fall of prices in England and above all, apparently, to avoid a situation in which reductions of wages would be necessary.

HP.6
The example of Great Britain was followed by other countries, notably by the United States. President Roosevelt reduced the gold content of the dollar because he wished to prevent a fall in wages and to restore the price level of the prosperous period between 1926 and 1929.

HP.7
In central Europe, the first country to follow Great Britain's example was the Republic of Czechoslovakia. In the years immediately after the war, Czechoslovakia, for reasons of prestige, had heedlessly followed a policy which aimed at raising the value of the krone, and she did not come to a halt until she was forced to recognize that increasing the value of her currency meant hindering the exportation of her products, facilitating the importation of foreign products, and seriously imperiling the solvency of all those enterprises that had procured a more or less considerable portion of their working capital by way of bank credit. During the first few weeks of the present year, however, the gold parity of the krone was reduced in order to lighten the burden of the debtor enterprises, and in order to prevent a fall of wages and prices and so to encourage exportation and restrict importation. Today, in every country in the world, no question is so eagerly debated as that of whether the purchasing power of the monetary unit shall be maintained or reduced.

HP.8
It is true that the universal assertion is that all that is wanted is the reduction of purchasing power to its previous level, or even the prevention of a rise above its present level. But if this is all that is wanted, it is very difficult to see why the 1926-29 level should always be aimed at, and not, say, that of 1913.

HP.9
If it should be thought that index numbers offer us an instrument for providing currency policy with a solid foundation and making it independent of the changing economic programs of governments and political parties, perhaps I may be permitted to refer to what I have said in the present work on the impossibility of singling out any particular method of calculating index numbers as the sole scientifically correct one and calling all the others scientifically wrong. There are many ways of calculating purchasing power by means of index numbers, and every single one of them is right, from certain tenable points of view; but every single one of them is also wrong, from just as many equally tenable points of view. Since each method of calculation will yield results that are different from those of every other method, and since each result, if it is made the basis of prac tical measures, will further certain interests and injure others, it is obvious that each group of persons will declare for those methods that will best serve its own interests. At the very moment when the manipulation of purchasing power is declared to be a legitimate concern of currency policy, the question of the level at which this purchasing power is to be fixed will attain the highest political significance. Under the gold standard, the determination of the value of money is dependent upon the profitability of gold production. To some, this may appear a disadvantage; and it is certain that it introduces an incalculable factor into economic activity. Nevertheless, it does

not lay the prices of commodities open to violent and sudden changes from the monetary side. The biggest variations in the value of money that we have experienced during the last century have originated not in the circumstances of gold production, but in the policies of governments and banks-of-issue. Dependence of the value of money on the production of gold does at least mean its independence of the politics of the hour The dissociation of the currencies from a definitive and unchangeable gold parity has made the value of money a plaything of politics. Today we see considerations of the value of money driving all other considerations into the background in both domestic and international economic policy. We are not very far now from a state of affairs in which "economic policy" is primarily understood to mean the question of influencing the purchasing power of money. Are we to maintain the present gold content of the currency unit, or are we to go over to a lower gold content? That is the question that forms the principal issue nowadays in the economic policies of all European and American countries. Perhaps we are already in the midst of a race to reduce the gold content of the currency unit with the object of obtaining transitory advantages (which, moreover, are based on self-deception) in the commercial war which the nations of the civilized world have been waging for decades with increasing acrimony, and with disastrous effects upon the welfare of their subjects.

HP.10

It is an unsatisfactory designation of this state of affairs to call it an emancipation from gold. None of the countries that have "abandoned the gold standard" during the last few years has been able to affect the significance of gold as a medium of exchange either at home or in the world at large. What has occurred has not been a departure from gold, but a departure from the old legal gold parity of the currency unit and, above all, a reduction of the burden of the debtor at the cost of the creditor, even though the principal aim of the measures may have been to secure the greatest possible stability of nominal wages, and sometimes of prices also.

HP.11

Besides the countries that have debased the gold value of their currencies for the reasons described, there is another group of countries that refuse to acknowledge the depreciation of their money in terms of gold that has followed upon an excessive expansion of the domestic note circulation, and maintain the fiction that their currency units still possess their legal gold value, or at least a gold value in excess of its real level. In order to support this fiction they have issued foreign-exchange regulations which usually require exporters to sell foreign exchange at its legal gold value, that is, at a considerable loss. The fact that the amount of foreign money that is sold to the central banks in such circumstances is greatly diminished can hardly require further elucidation. In this way a "shortage of foreign exchange" (Devisennot) arises in these countries. Foreign exchange is in fact unobtainable at the prescribed price, and the central bank is debarred from recourse to the illicit market in which foreign exchange is dealt in at its proper price because it refuses to pay this price. This "shortage" is then made the excuse for talk about transfer difficulties and for prohibitions of interest and amortization payments to foreign countries. And this has practically brought international credit to a standstill. Interest and amortization are paid on old debts either very unsatisfactorily or not at all, and, as might be expected, new international credit transactions hardly continue to be a subject of serious consideration. We are no longer far removed from a situation in which it will be impossible to lend money abroad because the principle has gradually become accepted that any government is justified in forbidding debt payments to foreign countries at any time on grounds of "foreign-exchange policy." The real meaning of this foreign-exchange policy is exhaustively discussed in the present book. Here let it merely be pointed out that this policy has much more seriously injured international economic relations during the last three years than protectionism did during the whole of the preceding fifty or sixty years, the measures that were taken during the world war included. This throttling of international credit can hardly be remedied otherwise than by setting aside the principle that it lies within the discretion of every government, by invoking the shortage of foreign exchange that has been caused by its own actions, to stop paying interest to foreign countries and also to prohibit interest and amortization payments on the part of its subjects. The only way in which this can be achieved will be by removing international credit transactions from the influence of national legislatures and creating a special international code for it, guaranteed and really enforced by the League of Nations. Unless these conditions are created, the granting of new international credit will hardly be possible. Since all nations have an equal interest in the restoration of international credit, it may probably be expected that attempts will be made in this direction during the next few years, provided that Europe does not sink any lower through war and revolution. But the monetary system that will

constitute the foundation of such future agreements must necessarily be one that is based upon gold. Gold is not an ideal basis for a monetary system. Like all human creations, the gold standard is not free from shortcomings; but in the existing circumstances there is no other way of emancipating the monetary system from the changing influences of party politics and government interference, either in the present or, so far as can be foreseen, in the future. And no monetary system that is not free from these influences will be able to form the basis of credit transactions. Those who blame the gold standard should not forget that it was the gold standard that enabled the civilization of the nineteenth century to spread beyond the old capitalistic countries of Western Europe, and made the wealth of these countries available for the development of the rest of the world. The savings of the few advanced capitalistic countries of a small part of Europe have called into being the modern productive equipment of the whole world. If the debtor countries refuse to pay their existing debts, they certainly ameliorate their immediate situation. But it is very questionable whether they do not at the same time greatly damage their future prospects. It consequently seems misleading in discussions of the currency question to talk of an opposition between the interests of creditor and debtor nations, of those which are well supplied with capital and those which are ill supplied. It is the interests of the poorer countries, who are dependent upon the importation of foreign capital for developing their productive resources, that make the throttling of international credit seem so extremely dangerous.

HP.12

The dislocation of the monetary and credit system that is nowadays going on everywhere is not due—the fact cannot be repeated too often—to any inadequacy of the gold standard. The thing for which the monetary system of our time is chiefly blamed, the fall in prices during the last five years, is not the fault of the gold standard, but the inevitable and ineluctable consequence of the expansion of credit, which was bound to lead eventually to a collapse. And the thing which is chiefly advocated as a remedy is nothing but another expansion of credit, such as certainly might lead to a transitory boom, but would be bound to end in a correspondingly severer crisis.

HP.13

The difficulties of the monetary and credit system are only a part of the great economic difficulties under which the world is at present suffering. It is not only the monetary and credit system that is out of gear, but the whole economic system. For years past, the economic policy of all countries has been in conflict with the principles on which the nineteenth century built up the welfare of the nations. International division of labor is now regarded as an evil, and there is a demand for a return to the autarky of remote antiquity. Every importation of foreign goods is heralded as a misfortune, to be averted at all costs. With prodigious ardour, mighty political parties proclaim the gospel that peace on earth is undesirable and that war alone means progress. They do not content themselves with describing war as a reasonable form of international intercourse, but recommend the employment of force of arms for the suppression of opponents even in the solution of questions of domestic politics. Whereas liberal economic policy took pains to avoid putting obstacles in the way of developments that allotted every branch of production to the locality in which it secured the greatest productivity to labor, nowadays the endeavor to establish enterprises in places where the conditions of production are unfavorable is regarded as a patriotic action that deserves government support. To demand of the monetary and credit system that it should do away with the consequences of such perverse economic policy, is to demand something that is a little unfair.

HP.14

All proposals that aim to do away with the consequences of perverse economic and financial policy, merely by reforming the monetary and banking system, are fundamentally misconceived. Money is nothing but a medium of exchange and it completely fulfills its function when the exchange of goods and services is carried on more easily with its help than would be possible by means of barter. Attempts to carry out economic reforms from the monetary side can never amount to anything but an artificial stimulation of economic activity by an expansion of the circulation, and this, as must constantly be emphasized, must necessarily lead to crisis and depression. Recurring economic crises are nothing but the consequence of attempts, despite all the teachings of experience and all the warnings of the economists, to stimulate economic activity by means of additional credit.

HP.15

This point of view is sometimes called the "orthodox" because it is related to the doctrines of the Classical economists who are Great Britain's imperishable glory; and it is contrasted with the "modern" point of view which is expressed in doctrines that correspond to the ideas of the Mercantilists of the sixteenth and seventeenth centuries. I cannot believe that there is really anything to be ashamed of in orthodoxy. The important thing is not whether a doctrine is orthodox or the latest fashion, but whether it is true or false. And although the conclusion to which my investigations lead, that expansion of credit cannot form a substitute for capital, may well be a conclusion that some may find uncomfortable, yet I do not believe that any logical disproof of it can be brought forward.

LUDWIG VON MISES
Vienna
June 1934

HP.16

PREFACE TO THE SECOND GERMAN EDITION

When the first edition of this book was published twelve years ago, the nations and their governments were just preparing for the tragic enterprise of the Great War. They were preparing, not merely by piling up arms and munitions in their arsenals, but much more by the proclamation and zealous propagation of the ideology of war. The most important economic element in this war ideology was inflationism.

HP.17
My book also dealt with the problem of inflationism and attempted to demonstrate the inadequacy of its doctrines; and it referred to the changes that threatened our monetary system in the immediate future. This drew upon it passionate attacks from those who were preparing the way for the monetary catastrophe to come. Some of those who attacked it soon attained great political influence; they were able to put their doctrines into practice and to experiment with inflationism upon their own countries.

HP.18
Nothing is more perverse than the common assertion that economics broke down when faced with the problems of the war and postwar periods. To make such an assertion is to be ignorant of the literature of economic theory and to mistake for economics the doctrines based on excerpts from archives that are to be found in the writings of the adherents of the historico-empirico-realistic school. Nobody is more conscious of the shortcomings of economics than economists themselves, and nobody regrets its gaps and failings more. But all the theoretical guidance that the politician of the last ten years needed could have been learned from existing doctrine. Those who have derided and carelessly rejected as "bloodless abstraction" the assured and accepted results of scientific labor should blame themselves, not economics.

HP.19
It is equally hard to understand how the assertion could have been made that the experience of recent years has necessitated a revision of economics. The tremendous and sudden changes in the value of money that we have experienced have been nothing new to anybody acquainted with currency history; neither the variations in the value of money, nor their social consequences, nor the way in which the politicians reacted to either, were new to economists. It is true that these experiences were new to many etatists, and this is perhaps the best proof that the profound knowledge of history professed by these gentlemen was not genuine but only a cloak for their mercantilistic propaganda.

HP.20
The fact that the present work, although unaltered in essentials, is now published in a rather different form from that of the first edition is not due to any such reason as the impossibility of explaining new facts by old doctrines. It is true that, during the twelve years that have passed since the first edition was published, economics has made strides that it would be impossible to ignore. And my own occupation with the problems of catallactics has led me in many respects to conclusions that differ from those of the first edition. My attitude toward the theory of interest is different today from what it was in 1911; and although, in preparing this as in preparing the first edition, I have been obliged to postpone any treatment of the problem of interest (which lies outside the theory of indirect exchange), in certain parts of the book it has nevertheless been necessary to refer to the problem. Again, on the question of crises my opinions have altered in one respect: I have come to the conclusion that the theory which I put forward as an elaboration and continuation of the doctrines of the Currency School is in itself a sufficient explanation of crises and not merely a supplement to an explanation in terms of the theory of direct exchange, as I supposed in the first edition.

HP.21
Further I have become convinced that the distinction between statics and dynamics cannot be dispensed with even in expounding the theory of money. In writing the first edition, I imagined that I should have to do without it, in order not to give rise to any misunderstandings on the part of the German reader. For in an article that had appeared shortly before in a widely read symposium, Altmann had used the concepts "static" and "dynamic," applying them to monetary theory in a sense that diverged from the terminology of the modern American school.*4 Meanwhile, however, the significance of the distinction between statics and dynamics in modern theory has probably become familiar to everybody

who, even if not very closely, has followed the development of economics. It is safe to employ the terms nowadays without fear of their being confused with Altmann's terminology. I have in part revised the chapter on the social consequences of variations in the value of money in order to clarify the argument. In the first edition the chapter on monetary policy contains long historical discussions; the experiences of recent years afford sufficient illustrations of the fundamental argument to allow these discussions now to be dispensed with.

HP.22
A section on problems of banking policy of today has been added, and one in which the monetary theory and policy of the etatists are briefly examined. In compliance with a desire of several colleagues I have also included a revised and expanded version of a short essay on the classification of theories of money, which was published some years ago in volume 44 of the Archiv für Sozialwissenschaft und Sozialpolitik.

HP.23
For the rest, it has been far from my intention to deal critically with the flood of new publications devoted to the problems of money and credit. In science, as Spinoza says, "the truth bears witness both to its own nature and to that of error." My book contains critical arguments only where they are necessary to establish my own views and to explain or prepare the ground for them. This omission can be the more easily justified in that this task of criticism is skillfully performed in two admirable works that have recently appeared.*5

HP.24
The concluding chapter of part three, which deals with problems of credit policy, is reprinted as it stood in the first edition. Its arguments refer to the position of banking in 1911, but the significance of its theoretical conclusions does not appear to have altered. They are supplemented by the above-mentioned discussion of the problems of present-day banking policy that concludes the present edition. But even in this additional discussion, proposals with any claim to absolute validity should not be sought for. Its intention is merely to show the nature of the problem at issue. The choice among all the possible solutions in any individual case depends upon the evaluation of pros and cons; decision between them is the function not of economics but of politics.

LUDWIG VON MISES
Vienna
March 1924

HP.25
