Copyright Acknowledgments

Grateful acknowledgment is made to the following sources for permission to reprint material copyrighted or controlled by them:


"B.C." (cartoon), reprinted with permission from Creator's Syndicate.

"Cartoon," by Booth, reprinted with permission from The New Yorker. Copyright © 1979, The New Yorker Magazine, Inc.


"The Biggest Scam in History," by James Ring Adams, reprinted from The Big Fix, 1990, by permission of John Wiley & Sons, Inc.

"The Necessary and the Desirable Range of Discretion to be Allowed to a Monetary Authority," by Jacob Viner, reprinted from In Search of a Monetary Constitution, edited by Leland B. Yeager, 1962, by permission of Harvard University Press.


Contents

PART I: INSTITUTIONS

1. Why Bother?
   J. Huston McCulloch
   3

2. The Theory of Money
   Carl Menger
   12

3. The Evolution of a Free Banking System: A Reappraisal
   George Selgin and Lawrence White
   23

4. The Establishment of Central Banking
   Kevin Dowd
   42

5. Wildcat Banking, Banking Panics, and Free Banking in the United States
   Gerald P. Dwyer
   68

6. The Evolution of the Bank Regulatory Structure
   F. Ward McCarthy, Jr.
   88

PART II: THEORY

7. The Banking Business: Fundamentals
   Barry N. Siegel
   109

8. Why Does Velocity Matter?
   Daniel L. Thornton
   131

9. Lessons of the German Inflation
   Henry Hazlitt
   139

10. The Consequences to Society of Changes in the Value of Money
    John Maynard Keynes
    151

11. Money and Interest Rates
    William Poole
    178

12. The Natural Rate of Unemployment: Concepts and Issues
    Stuart E. Weiner
    190
13. Inflation, the Misdirection of Labour and Unemployment
   F.A. Hayek 201
14. A Cash-Balance Interpretation of Depression
   Leland Yeager 212
15. The Genesis of the Depression
   Lionel Robbins 221
16. Are Banking Crises Free-Market Phenomena?
   George Selgin 239
17. The Biggest Scam in History
   James Ring Adams 252

PART III: POLICY

18. The Necessary and the Desirable Range of Discretion to be Allowed to a Monetary Authority
   Jacob Viner 267
19. The Gold Standard: Myths and Realities
   Michael David Bordo 287
   F.A. Hayek 316
21. Free Banking and Monetary Reform
   George Selgin 326
22. The Lender of Last Resort: Alternative Views and Historical Experience
   Michael David Bordo 333
Part I: Institutions
Money—a generally accepted medium of exchange—is not a costless institution. Substantial resources had to be channeled to the mining industry to support pure metallic money systems. Even today's fiat money systems involve tremendous resources, including the administrative and research staffs of central banks, to operate. Add to this the substantial costs of periodic episodes of inflation and deflation, and it is easy to see that monetary exchange is expensive. So “Why Bother?” Why not just abandon money altogether and rely on barter instead? A simple answer is that money overcomes the difficulties inherent in barter. In the essay that follows, J. Huston McCulloch explains just what these difficulties are and how monetary exchange avoids them. —G.S., Ed.

***************

One of the questions that most troubles people when they consider the role of money in the economy is, “Why bother?” We sell goods and services for money only in order to be able to buy other goods and services. Why not get back to nature by trading goods and services directly? At best, the intervention of money seems like an unnecessary nuisance that only obscures the underlying economic relations. Some claim it is more like a carcinogenic contaminant that poisons society.

1.1 THE POSSIBLE IMPOSSIBILITY OF BARTER

Consider, for example, an economy consisting of a butcher and a baker. The butcher would prefer to have a loaf of bread to eat. The baker, who has such a loaf of bread, would rather trade it for a steak. They could just trade steak for bread without using money at all. For this example barter is mutually advantageous: direct exchange of goods or services for other goods or services—is adequate to achieve an optional redistribution of the goods in the economy.

If we consider a slightly more complicated situation, however, we discover that a market economy based entirely on voluntary exchange might not be able to function efficiently by barter alone. Suppose there were a third individual—a candlestick maker—who was in possession of a third good: a candle. Suppose now that the butcher would be willing to exchange his steak for some bread, but would rather eat the steak himself than have a candle. The baker is an avid bookworm and would rather read than eat, so she prefers the candle to her loaf of bread. She is a vegetarian, however, and so would sooner eat bread than steak. The candlestick maker prefers the steak to his candle, and his candle to the bread.

In this simple economy no barter is possible. That is, there are no direct exchanges that are mutually advantageous to the pair of persons involved. The butcher and the baker can’t barter because, if they traded their goods, the baker would be stuck with a steak and therefore worse off. The butcher and the candlestick maker can’t barter, because the butcher wouldn’t consent. The baker and the candlestick maker can’t barter, because then the candlestick maker would be worse off. If the economy were confined to barter, each individual would end up with his or her second-most-favorite
good, even though goods are present in the economy to satisfy each person’s fondest desire.

With only three people and three goods, we have to think a little in order to work up an example in which barter is impossible. But in a modern industrial economy, with millions of variations of commodities and millions of individuals each specialized in the production of just a few of these commodities, barter is totally unworkable because of the vast number of situations like this that might arise.

In our extremely simple three-person economy, it is obvious how everyone could be made better off by rearranging ownership through a dictatorial decree instead of through voluntary exchange. For instance, suppose the baker seizes power. If she orders the butcher to give the candlestick maker his steak, directs the candlestick maker to give her his candle, and then gives the butcher her bread, everyone will be better off.* It would also be within her power, however, to decree the first two transactions, keep the bread (along with the candle) for herself, and then move in with the candlestick maker, leaving the butcher empty-handed! To protect the powerless, it is desirable to rule out involuntary reallocations. But would it still be possible to make everyone better off?

1.2 INDIRECT EXCHANGE

It would be possible, but only through a process of indirect exchange. Suppose that the butcher goes to the baker and proposes an exchange of steak for bread. The baker will turn him down, but might add that she would be willing to accept a candle in exchange for her bread. Now the butcher approaches the candlestick maker and asks if he will give him some bread for his steak. The candlestick maker replies that he would if he had some, but that all he has is a candle, which he would be willing to trade for the steak. If the butcher remembers that the baker was willing to take a candle for a loaf of bread, he will go ahead and trade steak for candle. Then he returns to the baker and trades the candle for the bread. They end up with their most desired commodity, entirely through voluntary exchange. But the first exchange was not barter, because the butcher did not receive a good he planned to use himself. On the contrary, he accepted a good he valued less highly than the good he gave up, simply because he believed it had exchange value somewhere else. The candle in this example serves as the medium of indirect exchange. It serves the same monetary function as the silver coin or green piece of paper that the worker accepts for his labor, in the belief that he can trade the coin or paper for the goods he really wants.

In this economy there is no particular reason for the candle to be singled out as the monetary medium. If, instead, the baker had spoken first with the candlestick maker and then with the butcher, the steak could have been the medium of indirect exchange. If the candlestick maker had gone to the butcher and then to the baker, the bread could have been used as money.

*In an economy with extensive division of labor, centrally directed redistribution encounters the additional problem that it is no longer obvious how to make everyone as well off as possible without making anyone worse off. This may be too complex a problem to solve centrally.
Notice that whichever good is used as money, its value in exchange must be established before it will be accepted in its monetary role. If the butcher had gone to the candlestick maker directly, without first speaking with the baker, he would not have traded his steak for the candle because he would not have known that the candle could be traded for the bread that he really wanted. Before he would accept the candle he had to have established, some time in the past, the terms on which it could be traded for what he was really after. Its value to him as money rests on its past exchange value (which he assumes carries over into the future), rather than on its future usability.

Notice also that the monetary commodity (the candle, for example) must be held for a period of time by someone like the butcher who wants it solely for its monetary function. This means that there are two sources of demand for the monetary commodity: first, the ordinary demand on the part of people like the baker who want the candle for its actual use value, and, second, the purely monetary demand.

1.3 THE PROBLEM

IN DIAGRAMS

The situations we have just described may be a little easier to visualize diagrammatically than verbally. Let $A$, $B$, and $C$ represent the three individuals and let $a$, $b$, and $c$ represent the goods with which each, respectively, is initially endowed. Individual $A$ prefers $b$ to $a$ and $a$ to $c$. In economic jargon, he obtains higher utility or satisfaction from consuming $b$ than $a$, and higher utility from consuming $a$ than $c$. He might prefer $c$ to nothing at all, but still would rather have $a$ or, better yet, good $b$. We can represent these preferences symbolically as ‘‘$b > a > c$.’’ The preferences and initial endowments of all three individuals are represented in Figure 1-1:

<table>
<thead>
<tr>
<th>Individual</th>
<th>Preferences</th>
<th>Initial endowment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A$</td>
<td>$b &gt; a &gt; c$</td>
<td>$a$</td>
</tr>
<tr>
<td>$B$</td>
<td>$c &gt; b &gt; a$</td>
<td>$b$</td>
</tr>
<tr>
<td>$C$</td>
<td>$a &gt; c &gt; b$</td>
<td>$c$</td>
</tr>
</tbody>
</table>

Figure 1-1. An economy in which no barter is possible.

Barter is impossible, since if $A$ and $B$ exchanged goods, $B$ would be worse off. If $A$ and $C$ traded, $A$ would be worse off, and if $B$ and $C$ traded, $C$ would be worse off. Everyone could be made better off by decree, as in Figure 1-2, but dictatorship is liable to lead to abuse of power, as in Figure 1-3.

<table>
<thead>
<tr>
<th>Individual</th>
<th>Initial endowment</th>
<th>Final endowment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A$</td>
<td>$a$</td>
<td>$b$</td>
</tr>
<tr>
<td>$B$</td>
<td>$b$</td>
<td>$c$</td>
</tr>
<tr>
<td>$C$</td>
<td>$c$</td>
<td>$a$</td>
</tr>
</tbody>
</table>

Figure 1-2. One possible reallocation by decree.
The necessary reallocation can be achieved entirely through voluntary exchange, but only provided one of the goods acts as a medium of indirect exchange. If good c is used, the two transactions shown in Figure 1-4 can take place. As Figure 1-5 demonstrates, good a could serve the monetary function equally well.

1.4
THE EVOLUTION
OF A COMMON
MONETARY MEDIUM

Of course you shouldn’t give up one good for another you value less unless you have reason to believe that someone else will give you something you value more in exchange for it. There are two reasons why a person might acquire a good: He might want to use it himself, or he in turn might think that it has exchange value. If there already is a good that is being used by a significant number of people as a medium of indirect exchange, that good is especially attractive to other people as a medium of indirect exchange. For this reason, the use of any particular commodity as money will be contagious; the right money to use is the money that everyone else uses. There is therefore a tendency for one commodity to be singled out as the common medium of indirect exchange, or as the money of the community (see Figure 1-6).

Which commodity is singled out is largely an historical accident. Some can be ruled out because they lack certain desirable properties:
It helps if a medium of indirect exchange is durable, portable, and divisible. Clams are unsatisfactory because they perish quickly. Sand is no good because enough sand to pay for a day’s food would be impossible to carry, assuming it had any value at all. But there is no way to deduce from this list of properties that gold, silver, and genuine Federal Reserve Notes will have a monetary function, while platinum, tin, and first edition Elvis Presley records will not.

The development of money is very similar to the development of language. It is fundamentally arbitrary which grunt or series of noises corresponds to an object such as fire. But once some people have started to use a particular noise to mean fire, other people will be inclined to adopt the same noise, since there is a ready-made circle of people who accept that meaning. Therefore there is a tendency in any society for one noise to be singled out as the noise for fire. Some noises can be ruled out because they lack certain desirable properties: a word should be pronounceable, concise, and unique. Thus “Fire!” is much handier in an emergency than “Xanbaglushosinapoferotelagahtnin!” especially if the latter expression also means “What’s for dinner?” and “Good night.” But there is no way to deduce from these rules that “fire” will be the noise that is settled upon and not “fuego” or “duría,” noises that are recognized in some circles.

1.5
FROM COMMODITY
MONEY TO FIAT MONEY
The inconvertible paper money or fiat money that we have in the United States today bears little resemblance to commodity money, be it gold, silver, or candles. Such a fiat money, however, must have evolved from an historical commodity-type money. Let us see how this might happen.

The butcher in our example may find it inconvenient to actually carry a candle around with him during the period between the time he sells his steak and the time he buys the bread. The candle may break, melt in the sun’s heat, or otherwise deteriorate in appearance as he carries it around. He may instead prefer to ask the candlestick maker to mark the candle “sold” and give him a paper receipt that will entitle him or anyone else presenting it to take actual delivery of the candle. The baker will probably be willing to accept the receipt
as readily as the monetary commodity itself, and people who use candles only as money will actually prefer such receipts.

These receipts, backed one-for-one with actual candles, closely resemble the gold certificates and silver certificates that once were issued by the U.S. government as money. Each of these certificates promised to pay a certain amount of gold or silver, and the gold or silver necessary to redeem each one was actually in the Treasury’s vaults. Such money certificates have the advantage that they can at any time be issued in any denominations, in which the monetary commodity itself would be inconveniently bulky, or in fractional denominations, into which it might not be practical to divide the monetary commodity.

In a complex economy, the monetary demand for the monetary commodity will be so great relative to its commodity demand that only a small fraction of the people who acquire money certificates will actually want to redeem them in order to consume the monetary commodity. It follows that in practice, issuers of money certificates will ordinarily find they can get away with keeping only fractional reserves of the monetary commodity. The candlestick maker, for example, might be able to get away with paying his workers and wax suppliers with paper notes that promise to pay one candle on demand, and still actually be able to keep that promise while keeping only one candle on hand for every five notes he circulates.

Once money substitutes such as 100% reserve money certificates or fractional reserve notes have for all practical purposes replaced the monetary commodity as the circulating medium, the final step to flat money can be taken. Recall that the people who accept these notes as money are doing so not because they want to redeem them, but only because they want to trade them for the goods they really want to acquire. They value these notes each time they accept them on the basis of the prior determination of their purchasing power. If the candlestick maker’s shop were now to burn down, taking all the candle reserves with it, this recollection of the candle notes’ prior purchasing power would be unaltered. People in the economy would have to use something as money, and the right money to use is the money which is historically customary in the society in question, in this case candle notes. People would therefore continue to use the candle notes as money, and the notes would continue to have value, even though they were now entirely irredeemable and unbacked in terms of candles. The fact that those people who really wanted to cash their in for candles would no longer be able to do so means that there would be some reduction in demand for them and some fall in their purchasing power. But since the monetary demand was the bulk of the demand for the candle notes, this fall would be minor and might go entirely unnoticecd. Candle notes would become a pure fiat money.

The expression “flat money” suggests that it springs into existence from the government’s fiat or decree, much as the sun comes into existence when, in the Latin version of Genesis, God says “Fiat lux” (“Let there be light.”). In fact, however, the government has no such divine powers of creation. Although convertible fiat money is a practical form of money (with some drawbacks, to be sure), it must have evolved through a long historical process, as described above, from a prior commodity money. This commodity money itself was not arbitrarily established by the government, but was the pro-
cess of a further historical competition among rival commodities. Government action has profoundly modified this evolution at times, often in unintended ways. But still the government is incapable of endowing fiat money with value out of thin air.

The U.S. dollar is an example of this change. At first the dollar was a gold or silver coin. Later some of these were replaced by gold and silver certificates. In 1913 Federal Reserve Notes were introduced which did not actually purport to be dollars, but rather were merely promises to pay dollars on demand. At first each one-dollar Federal Reserve Note was backed by 40¢ worth of gold plus more than 60¢ worth of obligations payable in the immediate future in gold dollars. Prior to 1923 they were freely convertible into gold, but since 1913 they have been totally inconvertible into anything. Today's dollars simply say

FEDERAL RESERVE NOTE
THE UNITED STATES OF AMERICA
ONE DOLLAR

The Government still has a gold stock that in some sense "backs" the dollar, but that could be entirely sold off without directly affecting the dollar's value. Today's dollar is essentially a pure fiat money, although this is only a recent stage in its evolution.

1.6 SECONDARY FUNCTIONS OF MONEY

Money ordinarily serves as the economy's customary unit of account, as a standard of deferred payment, and as a store of value in addition to its function as a medium of exchange. Only the medium of exchange function (or medium of indirect exchange, to be precise, since direct exchange doesn't require a medium) is essential, however. The medium of indirect exchange will tend to serve these other functions, but they are not necessary.

Once the economy settles on a common medium of indirect exchange, all goods that are traded will be traded for that medium, money. Therefore goods automatically have their values computed in terms of the monetary good. It would be inconvenient to keep accounts in anything but money, since an extra conversion would be necessary. Therefore prices are ordinarily quoted, and account books are ordinarily kept, in units of the circulating money. If the purchasing power of money is very uncertain, however, this will not necessarily be the case. During the German hyperinflation of 1923, for example, the rapidly depreciating Reichsmark continued to function as money. But its value was so uncertain that stores began to price goods in terms of U.S. dollars instead of Reichsmarks. The amount to be paid had to be determined by multiplying the dollar-denominated price by the current price of the dollar in the foreign exchange market. Money had ceased to serve as the unit of account.

Provided the future purchasing power of money is relatively predictable, it also makes sense to write long contracts in terms of monetary units. Insisting on a more exotic form of repayment would greatly reduce the number of people who would be willing to lend you money. But money will not necessarily be the standard of de-
ferred payment. When inflation is unpredictable, it becomes more and more likely that people will prefer to receive deferred payments in terms of real purchasing power, with the exact number of dollars to be determined at repayment time, on the basis of some price index.

Money necessarily serves as a store of value from the instant it is received to the instant it is spent. Sometimes, however, it is used as a store of value over unusually long periods of time. A person might prefer to literally stash away dollar bills rather than lend them out at interest if he doesn’t trust banks or corporate bonds. As long as the purchasing power of money is relatively stable, it makes a lot of sense to do this hoarding in terms of money, since it is directly exchangeable for a variety of goods. If the person were to fill his basement with sacks of pre-1964 silver coins instead, as in Figure 1-7, he would first have to convert his dollars into silver.

"Papa doesn’t want Tim in the bedroom while he’s hiding his little nest egg."

Figure 1-7. When money is stable in purchasing power, it is often used directly as a store of value. But this is only a secondary function of money, since in periods of rapid inflation a nonmonetary commodity (such as gold or silver in today’s economy) would be more suitable. In spite of the turnaround costs of converting money into the commodity and back again.

(Drawing by Booth; ©1979 The New Yorker Magazine, Inc.)

Then when he was ready to exchange his hoard for consumables, he would have to convert the silver back into money. If the market for silver had not changed in the meanwhile, he would take a loss, since coin dealers are in business to make a profit over and above their expenses and would only take back the silver at a price some-
what below the one at which they sold. Hoarding money instead of commodities eliminates the take of these middlemen. But again, money’s function as a long-range store of value is not essential. In highly inflationary times it would be wiser to hoard nonmonetary commodities, in spite of the loss due to turnaround costs.

In short, the unit of account, standard of deferred payment, and store of value functions of money are only secondary functions. The only really indispensable role of money in the economy is its role as medium of indirect exchange.

Problem 1.1.
Using the preferences and initial endowments of Figure 1-1, show the sequence of exchange through which good b could serve as a medium of indirect exchange.

Problem 1.2.
Given that A initially owns a, B owns b, and C owns c, find another set of preferences other than those given in Figure 1-1 under which everyone could be made better off, yet for which barter is impossible.

Note: Solutions are gathered at the end of the book. For best results, the student should work through each problem to a numerical solution before looking at the answers.

REFERENCES
The theory of the nature of money that we have presented here was originated by Carl Menger, Principles of Economics (Glencoe, Illinois: Free Press, 1930; originally published 1871), particularly Chapter 8, and by Ludwig von Mises, The Theory of Money and Credit (New Haven, Connecticut: Yale Univ. Press, 1935; originally published 1912).


Terms to Remember
Barter
Indirect exchange
Medium of indirect exchange
Utility
Fiat money
Gold certificate
Silver certificate
Fractional reserves
Federal Reserve Note
Secondary functions of money
Unit of account
Standard of deferred payment
Store of value

* A few references follow each chapter for the student who wishes to look more deeply into the subject matter. They are certainly not meant to be exhaustive.
2. The Theory of Money

Carl Menger

The idea that "money is a creature of the state" was once commonplace, and is still occasionally encountered. According to is, the institution of monetary exchange was the invention of primitive rulers, and the first coins were likewise the innovation of some ancient government. Carl Menger, founder of the Austrian School of economists, was among the first economists to dispel this misconception. Drawing on both economic theory and anthropological evidence, Menger argued that money was not "invented" by anyone or by any government. It was, rather, a product of "spontaneous evolution"—an unintended outgrowth of numerous individuals' rational pursuit of their self-interest. "On The Theory of Money" is a section from Menger's famous Principles of Economics, summarizing his theory of how money evolved.

—G.S., Ed.

**********************

I. THE NATURE AND ORIGIN OF MONEY

In the early stages of trade, when economizing individuals are only slowly awakening to knowledge of the economic gains that can be derived from exploitation of existing exchange opportunities, their attention is, in keeping with the simplicity of all cultural beginnings, directed only to the most obvious of these opportunities. In considering the goods he will acquire in trade, each man takes account only of their use value to himself. Hence the exchange transactions that are actually performed are restricted naturally to situations in which economizing individuals have goods in their possession that have a smaller use value to them than goods in the possession of other economizing individuals who value the same goods in reverse fashion. A has a sword that has a smaller use value to him than B's plough, while to B the same plough has a smaller use value than A's sword—at the beginning of human trade, all exchange transactions actually performed are restricted to cases of this sort.

It is not difficult to see that the number of exchanges actually performed must be very narrowly limited under these conditions. How rarely does it happen that a good in the possession of one person has a smaller use value to him that another good owned by another person who values these goods in precisely the opposite way at the same time? And even when this relationship is present, how much rarer still must situations be in which the two persons actually meet each other? A has a fishing net that he would like to exchange for a quantity of hemp. For him to be in a position actually to perform this exchange, it is not only necessary that there be another economizing individual, B, who is willing to give a quantity of hemp corresponding to the wishes of A for the fishing net, but also that the two economizing individuals, with these specific wishes, meet each other. Suppose that Farmer C has a horse that he would like to exchange for a number of agricultural implements and clothes. How unlikely it is that he will find another person who needs his horse and is, at the same time, both willing and in a position to give him all the implements and clothes he desires to have in
exchange!

This difficulty would have been insurmountable, and would have seriously impeded progress in the division of labor, and above all in the production of goods for future sale, if there had not been, in the very nature of things, a way out. But there were elements in their situation that everywhere led men inevitably, without the need for a special agreement or even government compulsion, to a state of affairs in which this difficulty was completely overcome.

The direct provision of their requirements is the ultimate purpose of all the economic endeavors of men. The final end of their exchange operations is therefore to exchange their commodities for such goods as have use value to them. The endeavor to attain this final end has been equally characteristic of all stages of culture and is entirely correct economically. But economizing individuals would obviously be behaving un- economically if, in all instances in which this final end cannot be reached immediately and directly, they were to forsake approaching it altogether.

Assume that a smith of the Homeric age has fashioned two suits of copper armor and wants to exchange them for copper, fuel, and food. He goes to market and offers his products for these goods. He would doubtless be very pleased if he were to encounter persons there who wish to purchase his armor and who, at the same time, have for sale all the raw materials and foods that he needs. But it must obviously be considered a particularly happy accident if, among the small number of persons who at any time wish to purchase a good so difficult to sell as his armor, he should find any who are offering precisely the goods that he needs. He would therefore make the marketing of his commodities either totally impossible, or possible only with the expenditure of a great deal of time, if he were to behave so un- economically as to wish to take in exchange for his commodities only goods that have use value to himself and not also other goods which, although they would have commodity-character to him, nevertheless have greater marketability than his own commodity. Possession of these commodities would considerably facilitate his search for persons who have just the goods he needs. In the times of which I am speaking, cattle were, as we shall see below, the most saleable of all commodities. Even if the armorer is already sufficiently provided with cattle for his direct requirements, he would be acting very unmercifully if he did not give his armor for a number of additional cattle. By so doing, he is of course not exchanging his commodities for consumption goods (in the narrow sense in which this term is opposed to "commodities") but only for goods that also have commodity-character to him. But for his less saleable commodities he is obtaining others of greater marketability. Possession of these more saleable goods clearly multiplies his chances of finding persons on the market who will offer to sell him the goods that he needs. If our armorer correctly recognizes his individual interest, therefore, he will be led naturally, without compulsion or any special agreement, to give his armor for a corresponding number of cattle. With the more saleable com-
modities obtained in this way, he will go to persons at the mar-
ket who are offering copper, fuel, and food for sale in order to
achieve his ultimate objective, the acquisition by trade of the
consumption goods that he needs. But now he can proceed to
this end much more quickly, more economically, and with a
greatly enhanced probability of success.

As each economizing individual becomes increasingly more
aware of his economic interest, he is led by this interest, with-
out any agreement, without legislative compulsion, and even
without regard to the public interest, to give his commodities in
exchange for other, more saleable, commodities, even if he does
not need them for any immediate consumption purpose. With
economic progress, therefore, we can everywhere observe the
phenomenon of a certain number of goods, especially those that
are most easily saleable at a given time and place, becoming,
under the powerful influence of custom, acceptable to every-
one in trade, and thus capable of being given in exchange for
any other commodity. These goods were called "Geld" by our
ancestors, a term derived from "gelen" which means to com-
penate or pay. Hence the term "Geld" in our language design-
ates the means of payment as such.5

The great importance of custom in the origin of money can
be seen immediately by considering the process, described above,
by which certain goods became money. The exchange of less
easily saleable commodities for commodities of greater market-
ability is in the economic interest of every economizing indi-
vidual. But the actual performance of exchange operations of
this kind presupposes a knowledge of their interest on the part
of economizing individuals. For they must be willing to accept
in exchange for their commodities, because of its greater mar-
ketability, a good that is perhaps itself quite useless to them.
This knowledge will never be attained by all members of a peo-
ple at the same time. On the contrary, only a small number of
economizing individuals will at first recognize the advantage
accruing to them from the acceptance of other, more saleable,
commodities in exchange for their own whenever a direct ex-
change of their commodities for the goods they wish to consume
is impossible or highly uncertain. This advantage is independ-
ent of a general acknowledgement of any one commodity as
money. For an exchange of this sort will always, under any cir-
cumstances whatsoever, bring an economizing individual con-
siderably nearer to his final end, the acquisition of the goods he
wishes to consume. Since there is no better way in which men
can become enlightened about their economic interests than by
observation of the economic success of those who employ the
correct means of achieving their ends, it is evident that nothing
favored the rise of money so much as the long-practiced, and
economically profitable, acceptance of eminently saleable com-
modities in exchange for all others by the most discerning and
most capable economizing individuals. In this way, custom and
practice contributed in no small degree to converting the com-
modities that were most saleable at a given time into commodi-
ties that came to be accepted, not merely by many, but by all
economizing individuals in exchange for their own commodi-
ties. Within the boundaries of a state, the legal order usually has an influence on the money-character of commodities which, though small, cannot be denied. The origin of money (as distinct from coin, which is only one variety of money) is, as we have seen, entirely natural and thus displays legislative influence only in the rarest instances. Money is not an invention of the state. It is not the product of a legislative act. Even the sanction of political authority is not necessary for its existence. Certain commodities came to be money quite naturally, as the result of economic relationships that were independent of the power of the state.

But if, in response to the needs of trade, a good receives the sanction of the state as money, the result will be that not only every payment to the state itself but all other payments not explicitly contracted for in other goods can be required or offered, with legally binding effect, only in units of that good. There will be the further, and especially important, result that when payment has originally been contracted for in other goods but cannot, for some reason, be made, the payment substituted can similarly be required or offered, with legally binding effect, only in units of the one particular good. Thus the sanction of the state gives a particular good the attribute of being a universal substitute in exchange, and although the state is not responsible for the existence of the money-character of the good, it is responsible for a significant improvement of its money-character.

2. THE KINDS OF MONEY APPROPRIATE TO PARTICULAR PEOPLES AND TO PARTICULAR HISTORICAL PERIODS

Money is not the product of an agreement on the part of economizing men nor the product of legislative acts. No one invented it. As economizing individuals in social situations became increasingly aware of their economic interest, they everywhere attained the simple knowledge that surrendering less saleable commodities for others of greater saleability brings them substantially closer to the attainment of their specific economic purposes. Thus, with the progressive development of social economy, money came to exist in numerous centers of civilization independently. But precisely because money is a natural product of human economy, the specific forms in which it has appeared were everywhere and at all times the result of specific and changing economic situations. Among the same people at different times, and among different peoples at the same time, different goods have attained the special position in trade described above.

In the earliest periods of economic development, cattle seem to have been the most saleable commodity among most peoples of the ancient world. Domestic animals constituted the chief item of the wealth of every individual among nomads and peoples passing from a nomadic economy to agriculture. Their marketability extended literally to all economizing individuals,
and the lack of artificial roads combined with the fact that cattle transported themselves (almost without cost in the primitive stages of civilization) to make them saleable over a wider geographical area than most other commodities. A number of circumstances, moreover, favored broad quantitative and temporal limits to their marketability. A cow is a commodity of considerable durability. Its cost of maintenance is insignificant where pastures are available in abundance and where the animals are kept under the open sky. And in a culture in which everyone attempts to possess as large herds as possible, cattle are usually not brought to market in excessive quantities at any one time. In the period of which I am speaking, there was no similar juncture of circumstances establishing as broad a range of marketability for any other commodity. If we add to these circumstances the fact that trade in domestic animals was at least as well developed as trade in any other commodity, cattle appear to have been the most saleable of all available commodities and hence the natural money of the peoples of the ancient world.7

The trade and commerce of the most cultured people of the ancient world, the Greeks, whose stages of development history has revealed to us in fairly distinct outlines, shows no trace of coined money even as late as the time of Homer. Barter still prevailed, and wealth consisted of herds of cattle. Payments were made in cattle. Prices were reckoned in cattle. And cattle were used for the payment of fines. Even Draco imposed fines in cattle, and the practice was not abandoned until Solon converted them, apparently because they had outlived their usefulness, into metallic money at the rate of one drachma for a sheep and five drachmae for a cow. Even more distinctly than with the Greeks, traces of cattle-money can be recognized in the case of the cattle breeding ancestors of the peoples of the Italian peninsula. Until very late, cattle and, next to them sheep, formed the means of exchange among the Romans. Their earliest legal penalties were cattle fines (imposed in cattle and sheep) which appear still in the lex Aeternia Tarpeia of the year 454 B.C., and were only converted to coined money 24 years later.8

Among our own ancestors, the old Germanic tribes, at a time when, according to Tacitus, they held silver and earthen vessels in equal esteem, a large herd of cattle was considered identical with riches. Barter stood in the foreground, just as it did among the Greeks of the Homeric age, and cattle again and, in this case, horses (and weapons too) already served as means of exchange. Cattle constituted their most highly esteemed property and were preferred above all else. Legal fines were paid in cattle and weapons, and only later in metallic money.9 Otto the Great still imposed fines in terms of cattle.

Among the Arabs, the cattle standard existed as late as the time of Mohammed.10 Among the peoples of eastern Asia Minor, where the writings of Zoroaster, the Zendavesta, were held sacred, other forms of money replaced the cattle standard only quite late, after the neighboring peoples had long given over to a metallic currency.11 That cattle were used as currency by the Hebrews,12 by the peoples of Asia Minor, and by the in-
habitants of Mesopotamia, in prehistoric times may be supposed although we cannot find evidence of it. These tribes all entered history at a level of civilization at which they had presumably already gone beyond the cattle standard—if one may be permitted to draw general conclusions, by analogy, from later developments, and from the fact that it appears to be unnatural in a primitive society to make large payments in metal or metallic implements.  

But rising civilization, and above all the division of labor and its natural consequence, the gradual formation of cities inhabited by a population devoted primarily to industry, must everywhere have had the result of simultaneously diminishing the marketability of cattle and increasing the marketability of many other commodities, especially the metals then in use. The artisan who began to trade with the farmer was seldom in a position to accept cattle as money; for a city dweller, the temporary possession of cattle necessity involved, not only discomforts, but also considerable economic sacrifices; and the keeping and feeding of cattle imposed no significant economic sacrifice upon the farmer only as long as he had unlimited pasture and was accustomed to keep his cattle in an open field. With the progress of civilization, therefore, cattle lost to a great extent the broad range of marketability they had previously had with respect to the number of persons to whom, and with respect to the time period within which, they could be sold economically. At the same time, they receded more and more into the background relative to other goods with respect to the spatial and quantitative limits of their marketability. They ceased to be the most saleable of commodities, the economic form of money, and finally ceased to be money at all.

In all cultures in which cattle had previously had the character of money, cattle-money was abandoned with the passage from a nomadic existence and simple agriculture to a more complex system in which handicraft was practised, its place being taken by the metals then in use. Among the metals that were at first principally worked by men because of their ease of extraction and malleability were copper, silver, gold, and in some cases also iron. The transition took place quite smoothly when it became necessary, since metallic implements and the raw metal itself had doubtless already been in use everywhere as money in addition to cattle-currency, for the purpose of making small payments.

Copper was the earliest metal from which the farmer’s plough, the warrior’s weapons, and the artisan’s tools were fashioned. Copper, gold, and silver were the earliest materials used for vessels and ornaments of all kinds. At the cultural stage at which peoples passed from cattle-money to an exclusively metallic currency, therefore, copper and perhaps some of its alloys were goods of very general use, and gold and silver, as the most important means of satisfying that most universal passion of primitive men, the desire to stand out in appearance before the other members of the tribe, had become goods of most general desire. As long as they had few uses, the three metals circulated almost exclusively in finished forms. Later, circulating as
raw metal, they were less limited as to use and had greater divisibility. Their marketability was neither restricted to a small number of economizing persons nor, because of their great usefulness to all peoples and easy transportability at relatively slight economic sacrifices, confined within narrow spatial limits.

Because of their durability they were not restricted in marketability to narrow limits in time. As a result of the general competition for them, they could be more easily marketed at economic prices than any other commodities in comparable quantities (p. 287). Thus we observe an economic situation in the historical period following nomadism and simple agriculture in which these three metals, being the most salable goods, became the exclusive means of exchange.

This transition did not take place abruptly, nor did it take place in the same way among all peoples. The newer metallic standard may have been in use for a long time along with the older cattle standard before it replaced the latter completely. The value of an animal, in metallic money, may have served as the basis for the currency units even after metal had completely displaced cattle as currency in trade. The Dektoboson, Tetryon, and Hektomboson of the Greeks, and the earliest metallic money of the Romans and Gauls were probably of this nature, and the animal picture appearing on the pieces of metal was probably a symbol of this value.

It is, to say the least, uncertain whether copper or brass, as the most important of the metals in use, were the earliest means of exchange, and whether the precious metals acquired the function of money only later. In eastern Asia, in China, and perhaps also in India, the copper standard experienced its most complete development. In central Italy an exclusively copper standard also developed. In the ancient cultures on the Euphrates and Tigris, on the other hand, not even traces of the former existence of an exclusively copper standard are to be found, and in Asia Minor and Egypt, as well as in Greece, Sicily, and lower Italy, its independent development was arrested, wherever it had existed at all, by the rapid developments of Mediterranean commerce, which could not be carried on adequately with copper alone. But it is certain that all peoples who were led to adopt a copper standard as a result of the material circumstances under which their economy developed, passed on from the less precious metals to the more precious ones, from copper and iron to silver and gold, with the further development of civilization, and especially with the geographical extension of commerce. In all places, moreover, where a silver standard became established, there was a late transition to a gold standard, and if the transition was not always actually completed, the tendency existed nevertheless.

In the narrow commerce of an ancient shrine city with the surrounding region, and in keeping with the early simplicity of Sabin customs, when the cattle-standard had outlived its usefulness, copper best served the practical purposes of the farmers and of the city dwellers as well. It was the most important metal in use, certainly the commodity whose marketability extended to the largest number of persons, and the quantitative limits of
its marketability were wider than those of any other commodity
—the most important requisites of money in the primitive stages
of civilization. It was, moreover, a good whose easy and in-
expensive preservation and storage in small amounts and whose
relatively moderate cost of transportation qualified it to a suf-
ficient degree for monetary purposes within narrow geographi-
cal limits. But as soon as the area of trade widened, as the rate
of commodity turnover quickened, and as the precious metals
became more and more the most salable commodities of a new
epoch, copper naturally lost its capacity to serve as money. With
the trade of this people extending over the whole world, with
the rapid turnover of their commodities, and with the increas-
ing division of labor, each economizing individual felt more
and more the need of carrying money on his person. With the
progress of civilization, the precious metals became the most
salable commodities and thus the natural money of peoples
highly developed economically.

The history of other peoples presents a picture of great dif-
ferences in their economic development and hence also in their
monetary institutions. When Mexico was invaded for the first
time by Europeans, it appears already to have reached an un-
usual level of economic development, according to the reports
published by eyewitnesses about the condition of the country
at that time. The trade of the ancient Aztecs is of special inter-
est to us for two reasons: (1) it proves to us that the economic
thinking that leads men to activity directed to the fullest pos-
sible satisfaction of their needs is everywhere responsible for
analogous economic phenomena, and (2) ancient Mexico pre-
sents us with the picture of a country in the state of transition
from a pure barter to a money economy. We thus have the rec-
ord of a situation in which we can observe the characteristic
process by which a number of goods attain greater prominence
than the rest and become money.

The reports of the conquistadors and contemporary writers
depict Mexico as a country with numerous cities and a well or-
organized and imposing trade in goods. There were daily markets
in the cities, and every five days major markets were held which
were distributed over the country in such a way that the major
market of any one city was not impaired by the competition of
that of a neighboring city. There was a special large square in
each city for trade in commodities, and in it a particular place
was assigned for each commodity, outside of which trade in that
commodity was forbidden. The only exceptions to this rule
were foodstuffs and objects difficult to transport (timber, tan-
ning materials, stones, etc.). The number of people assembled
at the market place of the capital, Mexico, was estimated to
have been 50,000 to 55,000 for the daily markets, and between
40,000 and 50,000 on major market days. A great many varieties
of commodities were traded.18

The interesting question that arises is whether, in the mar-
kets of ancient Mexico, which were similar in so many ways to
those of Europe, there had also already appeared phenomena
analogous in nature and origin to our money.
The actual report of the Spanish invaders is that the trade of Mexico, at the time they first entered the country, had long since ceased to move exclusively within the limits of simple barter, and that some commodities had instead already attained the special status in trade that I discussed more extensively earlier—that is, the status of money. Cocoa beans in small bags containing 8,000 to 14,000 beans, certain small cotton handkerchiefs, gold and in general quills that were accepted according to size (balances and weighing instruments in general being unknown to the Mexicans), pieces of copper, and finally, thin pieces of tin, appear to have be the commodities that were readily accepted by everyone (as money), even if the persons receiving them did not need them immediately, whenever a direct exchange of immediately usable commodities could not be accomplished.

Eye-witnesses mention the following commodities as being traded on the Mexican markets: live and dead animals, cocoa, all other foods, precious stones, medicinal plants, herbs, gums, resins, earths, prepared medicines, commodities made of the fibers of the century plant, of palm leaves, and of animal hair, articles made of feathers, and of wood and stone, and finally gold, copper, tin, timber, stones, tanning materials, and hides. If we consider not only this list of commodities but also (1) the fact that Mexico, at the time of its discovery by Europeans, was already a developed country with some industry and populous cities, (2) that since the majority of our domestic animals were unknown to them, a cattle-standard was entirely out of the question, (3) that cocoa was the daily beverage, cotton the most common clothing material, and gold, copper, and tin the most widely used metals of the Aztec people, and (4) that the nature of these commodities and the fact of their general use gave them greater marketability than all other commodities, it is not difficult to understand exactly why these goods became the money of the Aztec people. They were the natural, even if little developed, currency of ancient Mexico.

Analogous causes were responsible for the fact that animal skins became money among hunting peoples engaged in external trade. Among hunting tribes there is naturally an over-supply of furs, since providing a family with food by means of hunting leads to so great an accumulation of skins that at most only a competition for especially beautiful or rare kinds of skins can arise among the members of the hunting tribe. But if the tribe enters into trade with foreign peoples and a market for skins arises in which numerous consumable goods can, at the choice of the hunters, be exchanged for furs, nothing is more natural than that skins will become the most saleable good, and hence that they will come to be preferred and accepted even in exchanges taking place between the hunters themselves. Of course hunter A does not need the skins of hunter B that he accepts in an exchange, but he is aware that he will be able to exchange them easily on the markets for other goods that he does need. He therefore prefers the skins, even though they also have only
the character of commodities to him, to other commodities in his possession that are less easily saleable. We can actually observe this relationship among almost all hunting tribes who carry on foreign trade with their skins.\footnote{The fact that slaves and chunks of salt became money in the interior of Africa, and that cakes of wax on the upper Amazon, cod in Iceland and Newfoundland, tobacco in Maryland and Virginia, sugar in the British West Indies, and ivory in the vicinity of the Portuguese colonies, took on the functions of money is explained by the fact that these goods were, and in some cases still are, the chief articles exported from these places. Thus they acquire, just as did furs among hunting tribes, a pre-eminent marketability.

The local money-character of many other goods, on the other hand, can be traced back to their great and general use value locally and their resultant marketability. Examples are the money-character of dates in the oasis of Siwa, of tea-bricks in central Asia and Siberia, of glass beads in Nubia and Senuar, and of ghussub, a kind of millet, in the country of Aahir (Africas). An example in which both factors have been responsible for the money-character of a good is provided by cowrie-shells, which have, at the same time, been both a commonly desired ornament and an export commodity.\footnote{Thus money presents itself to us, in its special locally and temporally different forms, not as the result of an agreement, legislative compulsion, or mere chance, but as the natural product of differences in the economic situation of different peoples at the same time, or of the same people in different periods of their history.}


2. For obvious reasons, the words "Geld" and "pellen" in this and the following sentences are left untranslated.—TR.

3. See the first two paragraphs of Appendix I (p. 518) for material originally appearing here as a footnote.—TR.


5. See Appendix J (p. 518) for material originally appended here as a footnote.—TR.


7. See the last two paragraphs of Appendix I (p. 518) for material appended here as a footnote in the original.—TR.

16. A beaver skin is still the unit of exchange value in several regions of the Hudson’s Bay Company. Three martens are equal to one beaver, one white fox to two beavers, one black fox or one bear equal to four beavers, and one rille equal to 15 beavers ("Die Jäger im nördlichen Amerika," Das Ausland, XIX, no. 21, [Jan. 21, 1846], 83). The Estonian word "raba" (money) has in the related language of the Laplanders the meaning of fur (Philipp Krug, Zur Münzwende Russlands, St. Petersburg, 1853). On fur money in the Russian middle ages, see the report by Nestor (A. L. Schöner, translator, Nestor, Russische Annalen, Goettingen, 1869, p. 190). The old word, "sung" (money) really means marten. At least as late as 1850 a Russian war chest containing 3450 rubles in silver and 7000 rubles worth of fur was taken. See Nikolai Karamzin, Geschichte des russischen Reichs, Riga, 1820-1825, XI, 185). See also Roscher, op. cit., p. 309, and Heinrich Steorch, Handbuch der National-Wirtschaftslehre, ed. by K. H. Rau, Hamburg, 1890, III, 25-46.