

# MONEY AND CURRENCY

IN RELATION TO INDUSTRY,  
PRICES, AND THE RATE  
OF INTEREST

BY

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TO  
MY FRIEND  
HERMANN HENRY KOHLSAAT  
A STANCH FRIEND  
OF  
SOUND MONEY

## PREFACE

There are so many books upon money that the author of a new one needs to offer a word of justification. This book differs from others in several important respects. While it is intended to be a complete exposition of the science of money, aiming its appeal at the understanding rather than at the prejudices of men, its unique characteristics, if it possess any, will be found in the deep practical significance it discovers in the phenomena of price, in its analysis of the demand for money, in its exposition of credit as related to prices and the rate of interest, and in the clearness it gives to the concepts of commodity money, fiat money, and credit money.

This book deals with money as an independent economic entity, and seeks to bring out the fact that "price" in the world of business is a more important word than "value." Economists have too generally assumed that money, being only a medium of exchange, can be left out of calculation in a scientific explanation of the phenomena of production and consumption. They reduce trade to terms of barter, assuming that men work for goods and that they exchange goods for goods. Money cannot thus be set aside. It is itself an economic good, one of the most important in the entire list; and changes in its value exert a powerful influence on the production and distribution of wealth. Indeed, the welfare of society is influenced more by changes in its value than by changes in the value of any other commodity. As is pointed out in Chapter VI, the maladjustment of prices caused by a change of relation between the money demand and the money supply is equivalent to a new alignment of values. As a result, the markets for goods are

sometimes depressed or stimulated by forces that greatly puzzle the practical man.

In recent years the theory of money has been beclouded by controversy over what is called the "quantity theory of money." In no scientific treatise has any theory deserving such an appellation been expounded. Certain writers, it is true, in explaining the law of demand and supply as determining the value of money, have failed to give due recognition to the variable nature of demand, and so have seemed to imply that the level of prices — that is, the value of money — depends almost wholly on the quantity of money in existence. In order that there may be no excuse for such a crude inference, the demand for money and the circumstances upon which it depends are in this book subjected to careful analysis. It is shown that the demand or need for money, on account of changes in the use of credit, in money efficiency, and in the total volume of exchanges, is subject to great fluctuations within short periods of time. Any mere "quantity theory of money," therefore, must be as inadequate as would be a "quantity theory of wheat."

To fiat money, a subject which has too generally been slighted, two chapters are given. It is important that the conditions which govern the value of such money be clearly understood. So long as people think that its value is due to the government stamp or to an act of Congress, its advocates in the United States, particularly during periods of industrial and trade depression, will too easily get the public ear. In order to illustrate the principles involved, and to emphasize the elements of peril inherent in the use of fiat money, a chapter is devoted to a discussion of the greenbacks and their value during the period when they were the standard of prices in the United States. The author's conclusion, namely, that the greenbacks during this period were essentially fiat money, getting their value from their utility as money rather than from the government promise they bore, will doubtless arouse some criticism.

The theory of money and credit is developed in the first four chapters. All the remaining chapters are illustrative of the theory. In order that the illustrations may be in harmony with actual conditions, the forces governing the ebb and flow of currency and gold are described in Chapter V. Chapters VI, VII, and VIII show how important is the relation which money and credit, through the medium of price and the rate of interest, bear to industry and the general welfare of society. The use of gold and silver as money is considered in the next four chapters, the issues raised in the long debate over bimetallism and the free coinage of silver being reviewed in order that the principles at stake may be brought to light. Fiat money constitutes the important subject of Chapters XIII and XIV, the author's theory and conclusions being reënforced by facts from the experience of several countries. Credit money, which is not money at all, but a form of credit possessing general acceptability, is treated in Chapter XV. The need for an elastic element in the currency — a need that can be satisfied only by credit money — is here considered. The last two chapters deal with the monetary experience of the United States. Here, as elsewhere, principles are made more conspicuous than the facts of coinage and legislation, it being manifestly more important to know why silver dollars are valuable than to know how many of them have been coined.

The author has written for practical men as well as for students in high schools and colleges. For this reason the technical terminology of modern economics has been avoided. For example, the phrase "marginal utility," which conveys no idea that cannot be set forth in everyday speech, occurs only once or twice and then is not essential to the context. Definite meanings are given to the words "money," "credit money," "currency," "cash," "circulation," etc., and an effort is made to be consistent in their use. The book is entitled *Money and Currency* partly for the purpose of making prominent the fact

that these two words, although often used as synonyms, are essentially different in meaning.

While the book is not intended to be historical or descriptive in character, the reader will find in it the salient facts of every important monetary system and most of the data that have served as the basis for argument in recent controversies. Teachers who wish to give their students a wider acquaintance with the history of money and with the details of coinage are recommended to use in connection with this book Mr. Horace White's admirable treatise *Money and Banking*.

I wish to record my indebtedness to Professor Harry R. Seager, who has read the proofs and made many helpful suggestions; to Hon. Frank A. Vanderlip and Hon. Lyman J. Gage, from whom I have obtained much practical information; and to Hon. George E. Roberts, Director of the Mint; Hon. William B. Ridgely, Comptroller of the Currency; and Hon. O. P. Austin, Chief of the Bureau of Statistics, — who have promptly and fully answered many letters of inquiry.

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## PREFACE FOR THE NEW EDITION

In this new edition Chapter XVII presents entirely new material, bringing the review of monetary and banking legislation in the United States up to date. A careful analysis is made of the important Federal Reserve Act of December 23, 1913, and the effects of its operation are considered. Important banking and price statistics have been added in the Appendix. I am greatly indebted to my colleagues, Major B. Foster and Chauncey R. Porter, for help in preparation of this edition.

J. F. J.

March, 1921

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# MONEY AND CURRENCY

## CHAPTER I

### THE MEDIUM OF EXCHANGE

1. Money devised to overcome the difficulties of barter. 2. Its evolution was unconscious. 3. Money is the most exchangeable thing in any market. 4. Money was probably first used as a medium of exchange and not as a standard. 5. Modern credit is a promise or contract to deliver money at some future time. 6. Two classes of credit and their relation to prices. 7. Seven different uses or definitions of money. 8. Distinction between money, credit money, currency, and cash. 9. "Price" and "profit" the important words in business.

1. It is commonly assumed that the historian, if he could carry his researches back far enough, would come upon a time when men severally produced all that they consumed, — an age of few wants and no exchanges except by force. To-day it is difficult for us to picture the human race under such primitive conditions. There is hardly a child who is not familiar with the words "buy" and "sell," and in the United States there is probably no family whose members produce all the things they consume. We do not know when the era of exchanging began. We can only conjecture that men gradually discovered by experience that their comfort could be increased by a division of labor which permitted each worker to devote himself to the tasks for which he had most skill.

Money is a tool invented to overcome the difficulties of barter. By analysis of the double difficulty which under a barter economy confronted a man wishing to exchange his surplus product, the utility of money becomes evident. In order that goods might be exchanged for goods, a rare coincidence of wants was essential. A man who had arrows which he wished to exchange for fish was

obliged to find a man who had fish which he wished to exchange for arrows. Evidently his problem would be greatly simplified if there were one thing universally and at all times wanted, for then he need only find a man who wanted arrows and take from him that thing in exchange; with that in hand, having found a man who had food to spare, he could obtain it by surrender of the thing which everybody desired.

2. Concerning the origin of money we can only speculate, for we have no record of a time when money was not used. Money, like speech, is doubtless a product of unconscious evolution. We do not know what substance was first used as money, but it seems certain that it must have been in the beginning some object of universal desire. Our knowledge of the tastes of primitive men and women, and of their modern descendants, gives color to the hypothesis that the first money consisted of some personal ornament. In the case of a people living by the sea, for example, rare and beautiful shells, if admired and prized by all, might naturally have begun to serve as a medium of exchange. A man who had spent the day fishing, and had got more fish than he and his family could eat, would be glad to exchange some of his catch for other articles which he desired. If he found a man who wanted fish, and had nothing to give for them except these beautiful shells, he would be tempted to make an exchange even though he himself had no desire for more shells, for he would be better off with a surplus of shells than with a surplus of fish, since the shells were in more general demand. It is easy to see how, under such circumstances, men and women might devote whole days to hunting shells, and at the end of each day exchange part of their stock for food and other articles of desire, the shells thus gradually coming into use as a current or common medium of exchange.

3. In some such fashion, doubtless, the evolution of money began. The concepts expressed by the words "buy" and "sell" are a product of the money economy. The buyer gives up money; the seller receives it. The exchange is one of real values or utilities, but it differs from barter in that only one party, instead of both, as in barter, gets an object that **may**

directly and immediately satisfy desire. The seller wants the money and accepts it, not because he expects to get pleasure from retaining it, but because he knows that it is the most exchangeable thing in the market, and that with it he can most easily obtain the things which will satisfy his tastes and needs. He wants money merely because of its exchangeability. In our hypothetical illustration shells were used as money because there was a universal want for them. They were the most exchangeable thing in the community, and it was that exchangeability which fitted them to serve as money. Just so soon as men began to exchange their surplus products for shells, not because they wanted them as ornaments, but because they expected to exchange them for other things which they wanted, the shells began to perform a new economic function, and to be in demand on that account. They served as ornaments on account of their beauty; they served as money on account of their immediate and universal exchangeability.

4. Some writers hold that the first service of money was as a standard of values, and not as a medium of exchange. As exchanges increased it is supposed that a need arose for some standard with which all articles could be compared in order that a basis of exchange might easily be reached. It is difficult to see how any article could have served as a standard unless it first served as a medium of exchange. Yet this question we need not stop to consider. At the present time the article which serves as a so-called "standard" or "denominator" of value is the thing itself which possesses universal acceptability, and which serves, either by itself or through its representatives, as a medium of exchange.

5. Money has a fleet-footed auxiliary or representative in credit. Much as the introduction of money simplified the problem of exchange, nevertheless its use in every purchase or sale necessitated the handling and testing of two valuable things, the article sold and the money given in payment. A man going to market had to have money in his pocket. As the wealth of men increased, exchanges grew in magnitude and the carrying and counting of money became burdensome. Then here and

there, in peaceful and law-abiding communities, men who had more or less frequent dealings with one another began to keep accounts and to sell goods without demanding the money in hand, their balances of debt and credit being settled at some convenient or agreed-upon time. Thus began the evolution of credit, and in the process men were doubtless quite unconscious of the almost infinite possibilities of this new system of exchange. It gave to money an unsuspected potency or efficiency. Wherever traders met there appeared credit, armed with power of attorney for money, and fully competent, if its credentials were not doubted, to represent money in any contract of exchange.

In the modern world of business credit plays so prominent a part in all buying and selling that men often think and speak of it as an independent thing or force. The student, however, must never lose sight of the relationship between credit and money. Credit and money are not two different things; credit, indeed, is not a thing at all, but merely the name given to a common and important use of money. A man who buys anything with credit really buys with money, the payment merely being deferred. Leaving barter out of account, we may say that at the present time money figures, either potentially or actually, on one side or the other of every exchange. Credit is merely money's representative or proxy.

Broadly defined, credit is the power to get goods in exchange by giving a promise or contract to deliver an equivalent at some future time. An exchange of goods against a promise to deliver goods is a kind of barter credit, and is not a common transaction. At the present time, in almost all credit exchanges money is the thing promised. Hence credit may be concretely defined as a promise to pay money.

It is evident that credit could not have been much employed by men until after the rights of property were respected and something resembling the modern law of contract was in force. A man will not part with the product of his labor for a mere promise unless he has confidence that the promise will be kept. Credit is, therefore, a development of later times than money; yet the explorer in Babylon has discovered promissory notes

which were graven on tablets in the days of Abraham, over two thousand years before the Christian era began. To-day most of the world's exchanges are effected by means of credit, and these promises to pay money are enforced by the law of every civilized land.

6. Credit differs from money in that not all forms of it possess an equal degree of acceptability. A man's check or promissory note will be taken only by people who know him and trust him, whereas every one will accept a bank note. Some forms of credit within a community have almost the same acceptability as money itself. For example, the greenback, which is merely the promise of the United States to pay gold, is a medium of exchange quite as acceptable within the country as gold itself. We divide credit, therefore, into two classes: (1) credit of general acceptability, such as greenbacks and bank notes; (2) credit of limited acceptability, such as bank checks, drafts, and promissory notes. Credit of the first class is popularly called *money*, and is even so named in some scientific treatises; in this book, however, it will be designated as credit money or representative money. The reader should bear in mind that it is not money at all, it is credit.

In many countries certain forms of credit money have been made legal tender, and on that account are prized by men as highly as money itself, for no creditor can refuse to accept them when offered by a debtor. In the United States, for instance, the silver dollar and greenback, although these are credit instruments, being the government's promises to pay gold, are legal tender for the payment of any debt calling for money.

Although the nature of credit is simple, its relation to price is not always perfectly evident. By the word "price" is meant the amount of money for which a thing will exchange. When we say that the price of a bushel of wheat is seventy cents, we mean that a bushel of wheat will exchange for seventy cents. If all exchanges were made for money, credit not being used in any form, the problem of price would be comparatively simple; it would be perfectly clear that the price of wheat measured the value or exchange power of money with respect

to wheat. But the use of credit seems to introduce a new element. Some writers even affirm that credit is more important than money in the determination of price, while others go to the other extreme and hold that the use of credit has no effect whatever on price. This is a theoretical question which we cannot discuss until we have gone more deeply into the nature of both money and credit.

7. Money has been the subject of innumerable books and pamphlets, some of them written by the world's greatest thinkers; nevertheless no subject in political economy is to-day more fruitful of controversy and misunderstanding among economists, and none seems more cloudy and confused in the popular mind. One cause of this misunderstanding is the lack of unanimity in the use of the word "money." In the newspapers, in "the street," and even in scientific treatises on political economy, we find the word used in widely different senses. Definition is essential to clear thinking. Let us consider, therefore, the different meanings which have been given to this word "money."

(a) *Scientific use.* Money is that thing which everybody in a community desires in some degree, and is willing to take in payment for goods parted with or for services rendered. This is money in the scientific sense. It is sometimes distinguished as standard or redemption money. In the United States, according to this definition, gold coin alone is money.

(b) *Popular use.* Money is popularly used as a synonym of cash or "ready money," being applied indiscriminately to all forms of currency, such as gold coin, bank notes, greenbacks, silver dollars, etc. This is the most common use of the word. In this sense money is made to include not only so-called "standard money," but also all kinds of credit money.

(c) *Figurative use.* Money is frequently employed in general literature and in popular speech as the equivalent of riches or wealth; as when a man is said to be "making money," or to have more money than he can spend.

(d) *Financial use.* Money is frequently employed as a synonym of capital or loanable funds; as "the money market," "time money," "money is tight." In this sense, which is

common in financial circles, money means lending power, and is more closely related, as we shall see later, to the savings of a community than to the amount of money or cash in existence.<sup>1</sup>

(e) *Legal use.* Among lawyers and in the courts money is anything the law declares a legal tender for the payment of a debt. Thus in the United States, bank notes, silver certificates, and gold certificates, not being legal tender, are not money in the legal sense, but gold coin, silver dollars, and greenbacks are.

(f) *Technical use under National Banking Act.* National banks in the United States are required by law to keep on hand a certain amount of "lawful money" as a reserve for the protection of depositors. "Lawful money" includes gold coin and bullion, gold certificates, silver dollars, silver certificates, greenbacks, and Treasury notes, — in fact all kinds of currency except bank notes. It must not be confused with legal tender.

(g) *Pseudo-scientific use.* By some writers money is made to include all media of exchange, not only money and credit money, but also checks, bills of exchange, promissory notes, and other forms of credit. Fortunately this vague use of the word is not common.<sup>2</sup>

When we analyze these various uses of the word "money," we find that the essential element in them all is the idea of universal acceptability. A representative of money—that is to say, a promise to deliver money upon demand or at some future time—may possess in ordinary transactions all the acceptability of money itself, and may, therefore, popularly be classed as money; yet it is not money, but credit, and must be sharply distinguished from the thing it represents. In this book the word will always be used in the scientific sense: *Money is that valuable thing or economic good which possesses in any country or community universal acceptability as a medium of exchange or means of payment.*

<sup>1</sup> Money, which is so commonly understood as the synonym of wealth, is more especially the form in use to denote it when borrowing is spoken of. Borrowing capital is universally spoken of as borrowing money; the loan market is called the *money market*; those who have their capital disposable for investment are called the *moneyed class*. — J. S. MILL, *Political Economy*, Book III, chap. viii, 2.

<sup>2</sup> See Farrer's *Studies in Currency*, pp. 187–189.



8. *Currency* denotes all media of exchange that possess universal acceptability within a country; it embraces, therefore, money itself and credit money, the latter being all those forms of credit which possess the same acceptability or exchangeability as the money which they promise. Thus in the United States gold alone is money; United States notes, gold certificates, silver certificates, bank notes, silver dollars, and subsidiary coins are credit money; all these lumped together constitute the country's supply of currency, or monetary circulation.<sup>1</sup>

*Cash* is practically a synonym of "currency," but is often used with the special connotation of "ready money" as opposed to credit of limited acceptability. Cash includes, therefore, both money and all kinds of credit money. By bankers it is applied also to "exchanges for the clearing house," — that is, all checks or demand drafts on other banks, which are immediately convertible into money or credit money.

For convenience of reference brief definitions of several important terms are here given.

*Utility* is want-satisfying power. Anything that is wanted by men possesses utility in the economic sense. It is not synonymous with usefulness. Many things much desired by men, and hence possessing great utility, would not popularly be called very useful; for instance, diamond scarf pins, cigars, and silk hats.

*Value* means exchange power or purchasing power. Nothing has value unless it has utility and is limited in supply. The value of a thing is shown by the quantities of other things it commands in exchange. The greater the utility of a thing, — in other words, the stronger the desire for it, — the greater its value; the greater its supply, the lower its value.

*Commodity* is the economist's term for "thing." As economists are not interested in things that do not satisfy wants, only

<sup>1</sup> The so-called "supply of money" in the United States, as estimated periodically by the Secretary of the Treasury, includes credit money as well as money, and might better be called the "supply of currency." On September 1, 1922, the supply of "money" was estimated to be \$8,228,000,000, but of this amount only about \$3,859,000,000, which was the estimated amount of gold in the country available for use as money, could properly be called money.