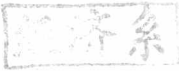


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PRINCIPLES AND PRACTICES OF
Money and Banking

REVISED EDITION

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UNIVERSITY OF PENNSYLVANIA



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Preface

THE FIRST EDITION of this book undertook to explain our monetary and banking system as a developing organism within which, despite the continuous process of change, certain lasting principles and concepts were discernible. The time has come to take account of further developments which have taken place since the earlier edition was published.

There are two principal reasons for applying to the study of money and banking the view expressed in an old French proverb: "The more it changes, the more it is the same." The first is to acquaint the student of money and banking with institutions, operations, and problems as they actually are, not as they may have been or seemed to be at some time in the past. The other, which is no less important, is to provide a basis for appreciating the significance of changes that will undoubtedly occur in the future—to the end that one's comprehension of the financial system, problems, and policies may continue to be realistic and alive.

The previous edition was oriented toward the problems of a country readjusting itself after a great world war. A more general focus is attempted in the present volume, one which—it is hoped—will help in retaining current applicability. Material is organized along topical rather than historical lines. Thus the problems which confront the monetary and banking system in wartime are examined analytically, but on the basis of experience in the First and Second World Wars. Again, the operations of money and banking in boom and depression are analyzed as a problem of general and continuing interest, but with illustrations drawn directly from our own history. A similar approach is employed with respect to

inflation and deflation, the Federal Reserve System, monetary and banking reform, and the like.

Primary emphasis is placed on the *economics* of money, credit, and banking. Theory is introduced, however, not as an end in itself but as a means of understanding how the financial system operates, its effects, and the problems which are encountered. There is a somewhat fuller treatment of monetary and banking principles than in the earlier edition and a further elaboration of the theory of credit in the modern economy.

Perhaps the most important change has to do with the treatment of money and banking in relation to determination of the level of business activity. By this time much of the heat and controversy has gone out of discussions of the income-expenditure approach to the study of economic problems and policy, and doctrinal differences now attract less interest than they once did. The importance to employment and business activity generally of the flow of monetary expenditures is recognized by business men, writers, and students representing all shades of political and economic inclination. Accordingly, the discussion of this approach—here described in terms of an analysis of aggregate expenditure—has been completely rewritten and moved to an earlier position in the book. The rearrangement of this material is designed to permit these basic and clarifying concepts to be employed in the subsequent treatment of the Federal Reserve System and of monetary and fiscal problems and policies. It may be remarked that no attempt has been made to present a comprehensive discussion of so-called Keynesian theory. But every effort has been made to provide a clear and concise explanation of essential ideas contributed from this source.

A good deal of new material has been added. A substantial share of it is drawn from the wealth of information and interpretation made available by the congressional investigations headed by Senator Paul Douglas and Representative Wright Patman. Actual and proposed policies involving relations between the Treasury and the Federal Reserve are examined, as well as interest rate developments since the famous Accord of 1951. Among other problems given new or expanded treatment are bank mergers, consumer credit, direct controls, convertibility, and revaluation of gold.

This volume is designed, then, to explain lucidly and logically the essentials of money and banking as they exist today. Greater detail and fuller explanations have been provided at numerous points where recommendations from other teachers have indicated that this was desirable. In some instances details have been reduced, as in the case of the struc-

tural organization of the International Monetary Fund and the International Bank for Reconstruction and Development. As before, primary emphasis is placed on functional aspects, and an effort has been made to demonstrate, by calling attention to various types of interrelationships, the ultimate economic unity of financial enterprise.

Certain parts of the book have been influenced by experience gained in the many years I have served as economist for the Penn Mutual Life Insurance Company and in the shorter period when I was economist for the Fidelity-Philadelphia Trust Company. These and other contacts have impressed me with the extraordinary practical value of abstract economic reasoning in the current affairs of business. In particular, I wish to acknowledge once again my personal appreciation to the late John A. Stevenson, formerly President of the Penn Mutual Life Insurance Company, for the insight he gave me into what can be accomplished, through independent intellectual leadership, in applying the fruits of theoretical analysis to the conduct of business. It is my sincere hope that this book will help to bridge the gap, which is all too frequently encountered, between the work of the college classroom and that of financial institutions.

Thanks are due the Social Science Research Council for support which helped to facilitate some of the research work upon which the original edition was based. The National Bureau of Economic Research kindly gave permission to use material from my writings previously published by them. Similar thanks are due the *Quarterly Journal of Economics*, the *American Economic Review*, and the *Journal of Finance*. Friends at the Federal Reserve Bank of Philadelphia and on the staff of the Board of Governors in Washington have given generously of their time and knowledge, as have colleagues at other institutions.

I am indebted most of all to colleagues, past and present, at the University of Pennsylvania. Professors Ervin Miller and Willis Jay Winn read the entire book in manuscript form. Other friends here and at other institutions read shorter sections. They have helped in correcting numerous faults, but are in no way responsible for such imperfections as have survived their kind efforts.

Philadelphia
March 1954

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Historical Foundations of Modern Money

THE FACT THAT we live in a monetary economy is taken for granted as being as natural and inevitable, let us say, as a system of highway transportation. The many conveniences of money are so apparent that anything other than a pecuniary society would seem so strange as to be out of the question except in a purely imaginary world.¹ Yet it is not easy to state specifically just how the institution of money principally affects our daily life.

MONEY IN RELATION TO PRICES AND PRODUCTION

At the risk of some oversimplification, it may be said that money serves two principal purposes in modern economic life. In the first place, *money itself is the basis of the price system*. It thereby helps to provide the framework of economic organization including trade, production, and the distribution of income. Secondly, *the expenditure of money is the principal immediate determinant of the level of economic activity*. These two generalizations constitute threads that run through most of what is taken up in this book.

Relation of Money to Prices

Money implies price and price implies money. When we speak of a price system, we necessarily assume the existence of money since it is in

¹ For brief descriptions of moneyless economies, see Paul Einzig, *Primitive Money*, London, Eyre and Spottiswoode, 1949, pp. 340-346, and F. Cyril James, *The Economics of Money, Credit, and Banking*, New York, Ronald Press, 1940, pp. 13-16.

money that prices are stated. It is impossible to have a price system without money or, practically speaking, to have money without having prices. Prices are nothing more than the values of different economic goods—food, clothing, services, and so on—stated in terms of money. One possible definition of money—better than many though not so complete as some—would be that money is that commodity in which prices are expressed.

In its capacity as the basis of the price system, money is an indispensable part of the elaborate system of division of labor which characterizes the modern economy. The organization of business enterprise, the satisfaction of human wants, the allocation of economic resources, the distribution of income among the various factors of production—all these would be impossible on the present scale without the price system which money makes possible.

Great as the benefits of money and the price system unquestionably are, money is capable of operating in highly injurious ways. A sharp rise in prices such as we ordinarily identify with inflation tends to bring about a transfer of wealth, indiscriminately and without regard to justice, from creditors to debtors. A fall in prices such as we associate with deflation may have the effect—in addition to the shifts it produces between debtors and creditors—of placing a damper on business activity, thereby contributing to bankruptcies, foreclosures, and the tragedy and waste of mass unemployment. These disrupting price movements mean that money and monetary institutions are not operating as we should like to have them operate.

Thus the price system offers great advantages, but when it functions badly it has serious disadvantages. The disadvantages are as much a part of the history of the economic institution which we call money as are the advantages. But the particular combination of advantages and disadvantages which we know at any given time is not inevitable. The primary task of public policy is to retain the advantages and get rid of the disadvantages by developing a monetary system that will function more effectively than the systems we have had in the past.

There is another reason why it is important to realize that inflation and deflation are essentially monetary phenomena. When serious inflation or deflation occurs, it is natural to look about for something to blame, such as we may find, for example, in abuse of monopoly power, in the form of government, in the action of foreign countries, or in the political party that happens to be in office. Such simple explanations of inflation or deflation are seldom justified and are capable of doing great harm. To say that when the general level of prices fluctuates it is really money that has

been unstable is not to end the search for responsibility and for possible correction, but it does serve to make the search more realistic.

The problems of money and prices can be viewed still more narrowly. Each one of us in the affairs of daily life is constantly dealing with prices. The more adequate our understanding of prices and price determination, the wiser our decisions as consumers, investors, business men, or voters are likely to be. The first step toward a more adequate understanding of economic affairs is to recognize that basically prices are a monetary expression.

Without money, then, we could not have a price system. Indispensable as that system is, however, the erratic behavior of prices with which each generation has become familiar through painful experience is evidence enough that a truly satisfactory monetary system is yet to be devised.

Money in Relation to Spending and Economic Activity

Money may also be thought of in terms of a continuous flow of money payments. Adam Smith declared that the *ultimate* end of production is consumption. It is no less true and considerably more pertinent for most members of society that the *immediate* end of production is sales. This is so whether the individual in question is a manufacturer, a farmer, a merchant, or a workman with nothing to sell but hours of labor. In order for business activity to continue steadily and at a prosperous level there must be a flow of money payments sufficient to absorb from the market the goods and services which are currently produced.

We have only to look about us to see the predominant position which monetary expenditure plays in the economic life of the community. The individual merchant, manufacturer, or farmer determines the scale on which he will order materials, hire workmen, or plan future operations primarily on the basis of his expectation of the demand by purchasers for whatever it is that is offered for sale. We base predictions of the future level of business activity and the probable direction of changes in prices and incomes on what we foresee in the way of the combined monetary payments by the community.

Every prediction of inflation, on the one hand, or of a decline in business, on the other, boils down to the conclusion that individuals, business, and government combined are about to spend more or less than the amount that would keep business and prices stable. The basic assumption, usually unconscious, is that there is some correct volume of spending—more than that would give us inflation, less would give us unemployment

and depression, and just the right amount would result in full employment and stable prices.

This concept of a desirable volume of spending by society embraces the idea sometimes referred to as "total effective demand." It is no less implicit in the familiar though incomplete definition of inflation as "too many dollars chasing too many goods." It is the basis for evaluating policies such as control of credit by the Federal Reserve or taxation and public works expenditure. Indeed, these may be thought of as constituting, among other things, different devices for expanding or contracting the volume of spending with a view, presumably, to bringing it closer to the level regarded as currently desirable. The principle, if we may call it that, of total effective demand is also the basis for forecasting business conditions; for economic forecasting is essentially an exercise in calculating the composite effect on total expenditures, relative to what is available, of all the elements that enter into spending by all segments of society. And total expenditures is merely another name for the aggregate volume of monetary payments by the community.

The two major aspects of the study of money, then, are in relation to the determination of prices and the level of business activity. These two aspects are, of course, closely interrelated. Nevertheless, the distinction between the two and the great practical significance of each to the individual and society at large should be kept constantly in mind. The basic importance of such major problems as choice of the monetary standard, policies of the Federal Reserve and the Treasury, and devaluation lies in the effect which decisions concerning these matters will have on the two questions of prices and business activity.

THE INFLUENCE OF CUSTOM ON MONEY AND MONETARY BEHAVIOR

The history of money is of interest to the archaeologist and the anthropologist for the light it sheds on the development of human institutions and culture. Its primary concern to the student of money, however, lies in the lessons it teaches concerning the nature of money and the operation of the monetary system. Perhaps the most important of these lessons is that custom is among the principal factors determining the forms of monetary institutions (using this term broadly to include money itself) and the way they function.

The index of a well-known book on primitive types of money lists 170 objects and materials which have been used as money, ranging alpha-

betically from adzes to yarn.² Included are such items as slaves, gunpowder, and the jawbones of pigs. The heaviest money mentioned would perhaps be elephants or the stone money of the island of Yap in the South Pacific and the lightest, the feather money of the New Hebrides. For generations, salt money has circulated among the natives of Ethiopia without being supplanted by the gold or silver coins of the traders with whom the natives came into contact. To the westerner who is used to other monetary forms, these types of money appear strange and unsatisfactory; but to the people who use them, they seem natural enough and entirely satisfactory in the way they operate.

An illustration of the attitude of native people to their particular monetary institutions is afforded by the remarks of a Yaplander, reported by an American naval officer in connection with the introduction of United States currency, following the occupation of that country by American forces in World War II.

Long time ago Spanish people come this place. They bring Spanish money. Only Spanish money good they say.

By and by, German people come. They take away all Spanish money. Now they say only German money good.

After a while Japanese come. Now German money no good, they say. Only Japanese money good. . . .

Now you come. Japanese money no good, you say. Take it all away. Only American money good.

Maybe sometime somebody else come and say American money no good. But stone money still good, just like all the time.³

It is important to recognize the influence of custom in conditioning the people of these communities to the continued use of what we regard as primitive forms of money. What is even more important is to ask ourselves whether our own preference for the particular types of money we use may not also be governed largely by custom.

Custom, it may be noted, has played an important part in the origin of monetary standards. It is often assumed that the most generally bartered economic good gradually came to serve as a common medium of exchange and eventually was accepted as the monetary standard; in fact, this is frequently suggested as the process by which the institution of money typically came into existence. Such an explanation, however plausible at first encounter, is hard to reconcile with the adoption of a

² Einzig, *ibid.*

³ Walter Karig, *The Fortunate Islands: A Pacific Interlude*, New York, Rinehart, 1948, pp. 196-197. Reprinted in Charles R. Whittlesey, *Readings in Money and Banking*, New York, W. W. Norton, 1952, p. 2.

great many of the monetary types which are known to history. The ox of Homeric Greece (*pekus* from which comes the word *pecuniary*), the elephant of Ceylon, or the skull money used in Borneo during the nineteenth century can scarcely have served widely as a medium of exchange; but it is not so difficult to see that oxen or elephants may have been used as a basis of comparing the wealth of individuals or tribes, and from that may have become the basis for measuring other values as well. Human skulls may be presumed to have enjoyed unique prestige in the social system of Borneo so that it became customary to relate pigs or palm nuts to this highly regarded unit when comparing their values for purposes of exchange or measuring wealth. In this way, skulls might be said to have constituted the standard of value and pigs and palm nuts the medium of exchange—just as in Western societies gold has served as the monetary standard, with other coins and paper money in everyday use as the medium of exchange.

The evidence suggests that barter—in its usual sense of exchange of commodities—was not the main factor in the evolution of money. The objects commonly exchanged in barter do not develop naturally into money, and the more important objects used as money seldom appear in ordinary everyday barter. Moreover, the inconveniences of barter do not disturb simple societies. Money appears to enter the economic system, as it were, from the outside, beginning its career as an adjunct to religion, to marriage rites, to legal and social procedures, serving originally as bride-price, as ransom, as ceremonial gift, or as pure means of ostentation, and only later, in more developed societies and particularly under the impact of external trade needs, filling its modern role of universal means of exchange. Money meant power and status long before it meant comfort and good living.⁴

Social customs generally, then, rather than anything so narrow as use in exchange alone seem to account for the origin of money and for most of the monetary standards about which we know. It is worth noting further that the prevailing conception of the inconveniences of barter—lack of “double coincidence of wants,” the problem of storage of value, divisibility, etc.—reflects our customs and conditions rather than those of the people who employed barter. With the limited number of commodities and the small scale of exchanges which prevail in these simple societies, the inconveniences of barter are inconsequential—no greater perhaps than the inconvenience to us of maintaining an adequate bank balance or safeguarding our purse against theft. Our impression of the disadvantages of barter results from considering our standards of wants and our conceptions of exchange in relation to the environment of a

⁴ *The Economist* (London), August 27, 1949, pp. 450–451.