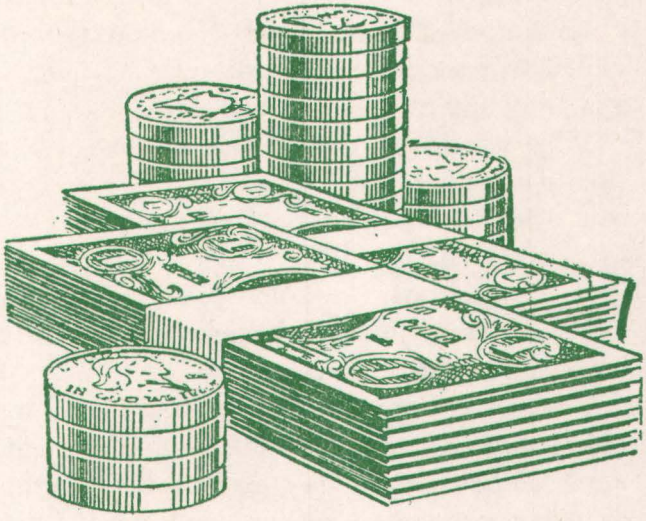
What We Use For MONEY



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FEDERAL COOPERATIVE EXTENSION SERVICE
OREGON STATE COLLEGE · CORVALLIS

WHAT do we use for money? Where does it come from? Where does it go?

This bulletin attempts to answer these apparently simple but fundamental questions; to show how the money supply of the United States is increased and how it is decreased; and to explain briefly how our monetary system works.

Our monetary laws are a crazy quilt, put together a piece at a time throughout our history. Like the crazy quilt, the system serves its purpose satisfactorily, even though we don't know where each piece came from or how it happened to be there. We have, therefore, omitted or ignored minor details and exceptions that may concern the bank operator or the technical student, but do not affect anyone else.

Certain State banks are given very incomplete consideration, since they are swept along in the broad current of Federal policies without regard for their nominal independence.

The vast hoard of gold buried at Fort Knox does not affect our daily lives or the economy of the country, so we leave it undisturbed.

Most of us are little interested in the inside of our automobile, but are vastly interested in how it steers and what happens when we step on the gas or on the brake; so with our monetary system, we leave technicalities with the professional but try to explain steering, acceleration, and braking.

E. L. Potter is professor emeritus of agricultural economics at Oregon State College, where he has been on the faculty for nearly half-a-century. Since 1908, "Dad" Potter has headed two departments, animal husbandry and agricultural economics. He is an authority on agricultural finance and served on the board of directors of an Oregon bank for 25 years.

His recent retirement has allowed time for his preparation of some basic, long-needed explanations of our monetary system and the American farm problem. His discussion of the latter subject is published as Extension Circular 618, available from the College or its County Extension offices.

—F. E. Price, dean and director

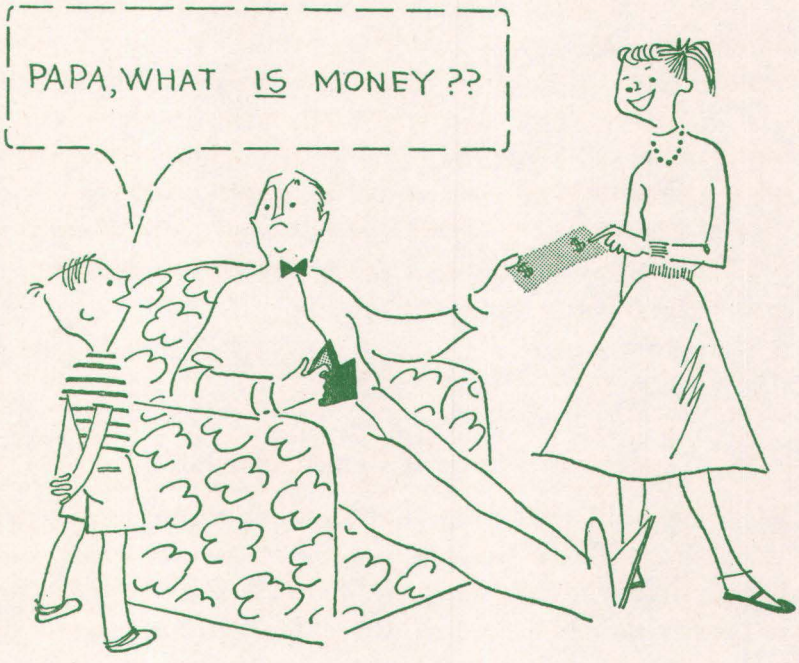
What We Use for MONEY

By E. L. Potter

THE MONEY of the United States is all "IOU's" and has been for the past twenty years. The same is true all over the world. There is no longer any metallic money that circulates on the basis of the market value of the metal. The term "IOU's" is not dignified, but we have no term that really covers all the various kinds of credit money that we have in this country.

By "money" we mean the generally accepted medium of exchange with which we meet our expenses and pay our debts. This means our bank deposits plus our paper money and coin.

The money of the United States is good money, but it is not well understood or easily understood. Also not well understood are the responsibilities and powers of the Federal Reserve System.



What Is Good Money?

If an IOU is to serve as money, and particularly as good money, it must meet three rigid requirements. First, it must be an IOU in which everyone has confidence, such as an IOU of our banks or our government. Second, it must be payable on demand, and not at some future date. Third, it must be of convenient denominations so it may be used to make payments of any desired size.

To illustrate: a personal note may be perfectly good, but the general public does not know it is good. A 20-year government bond for $10,000 is good, but the size is inconvenient and 20 years in the future does not buy groceries today. Things that are saleable quickly, such as government bonds, wheat, or fat pigs, are often said to be "the same as money." They are not money, since they must be exchanged for money before we can pay our bills.

About 2% of our money is IOU's of our Federal Government. The other 98% consists of IOU's of banks, more or less guaranteed by our government.

Our Federal Government is in the business of issuing IOU money by historical accident. It started when our government persisted in coining silver dollars long after the silver in the coin ceased to be worth a dollar. In order to make the silver dollars pass at par, our government agrees to give the holder of the silver dollar any other kind of dollar he may wish. The silver dollar, therefore, becomes in effect a promissory note for $1, written on a piece of silver worth perhaps $.50. Silver certificates, issued in place of silver for people who do not like to carry silver, are in the same category as the actual silver.

The Meaning of Bank Deposits

We have said that about 98% of our money consists of IOU's of banks. These bank IOU's are in two forms. One is a simple promissory note made payable to the bearer on demand; that is "paper money." By law, these demand notes are issued

only by the Federal Reserve Banks and not by other banks.

The second form of bank IOU's is the promise of our banks to honor checks which we usually speak of as "bank deposits."

When a deposit is made, the customer receives a sort of receipt known as a "deposit slip." In appearance, this deposit slip is merely a memorandum showing what has been deposited; but the law says that the bank issuing such a deposit slip is legally obligated to honor the depositor's checks, and to pay in any kind of money the holder of the check may demand. This obligation is ironclad regardless of what the depositor put into the bank. Depositors sometimes say that the bank should pay back what was put in. Actually, they would be very much shocked if the bank should offer to return the identical items deposited.

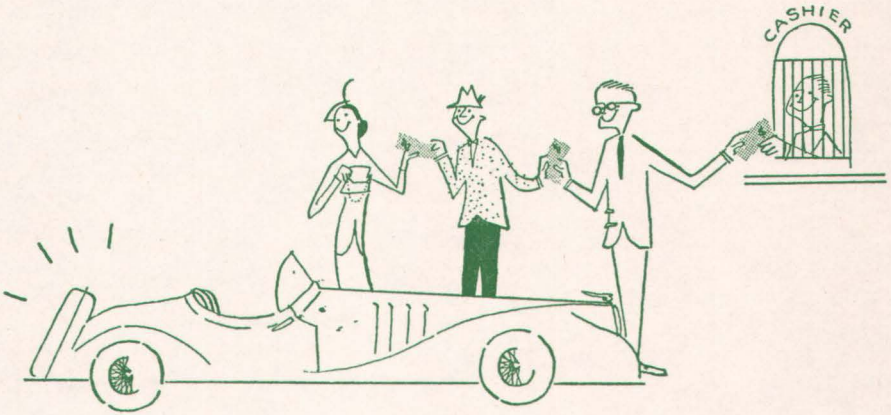
According to banking law the only institutions permitted to issue deposit slips, and thereby promise to honor checks, are those corporations which have been legally authorized to function as "banks," and which operate under the supervision of the banking authorities.

The total amount of deposits that banks may accept is determined by the bank's "reserve," which will be discussed later.

When we make a deposit in the bank, the item deposited is usually some form of IOU money, such as checks, paper, or coin, but this is not always the case and the exceptions are very important. When a customer "borrows" money from a bank, he actually deposits his note and receives a deposit slip which shows plainly that the item deposited was a note and was not checks or currency. Likewise, if a customer "sells" a government bond to his bank, he receives a deposit slip showing that he deposited a bond. We therefore deposit a note or bond just as truly as we deposit money, in spite of the fact that we call the act "borrowing" or "selling" rather than "depositing." Furthermore, the obligation of the bank to honor the customer's checks is just as binding as if the deposit had been made in money.

When we deposit money in the bank we merely exchange one kind of money for another, so the total amount of money in the country is not affected. On the other hand, when we deposit notes or bonds, which is not money, and receive in return the bank's obligation to honor checks, which is money, the total supply of money of the country is increased by just that much.

In reverse, when we pay our notes with checks against our deposit accounts, the obligation of the bank to honor our checks and our obligation to pay our notes are cancelled. The total money supply of the country is decreased.



Since the total money supply of the country increases every time a customer deposits a note or bond in his bank, and decreases every time a customer pays a note or bond with a check, the total changes every minute of the business day. In the long run, increases and decreases tend to offset each other, unless there is some definite economic pressure tending to increase or decrease borrowings from banks.

Banks also may issue deposit slips in return for gold, but in 1933 our government required that all our gold be deposited in banks, so now only imported or newly mined gold is available for deposit. Gold deposited in 1933 and earlier is still an asset of the banking system and protects our credit money by that much.

The central fact of our whole monetary system is, therefore, that new money is created by depositing notes or bonds in the banks, and the total money supply is decreased by paying off such notes and bonds with our checks. The only exceptions are silver certificates and metal coins, which comprise less than 2% of our total money supply.

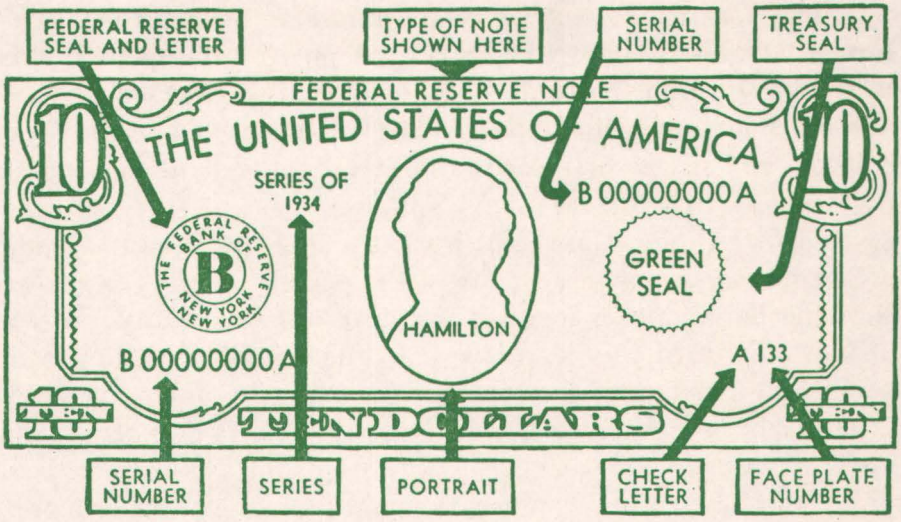
At first thought, it seems unreasonable that a bank should create money by a mere stroke of the pen. We must remember that the bank cannot legally, and dare not financially, issue a deposit slip until the depositor has "deposited" with the bank something of equal or greater value in the form of gold, money, checks, notes, or bonds. Note that these do not include any form of real estate, or physical goods, or any form of corporation stocks. Furthermore, the quality of the notes or bonds put in must be approved by the bank examiners.

Paper Money

Federal Reserve Notes, which make up most of our "paper money," are just the same as bank deposits, except that the promise to pay is in the form of a demand note which may pass from hand to hand more or less indefinitely before coming back to the bank which issued it. Ownership of bank deposits, however, may be transferred only by written order of the depositor—that is, by check.

The similarity is concealed partially by the fact that the Federal Reserve Banks are the only banks permitted by law to issue demand notes. Similarity is further concealed because a Federal Reserve Note says on its face: "The United States of America will pay * * *"; whereas, the actual payment will be made by 1 of the 12 Reserve Banks, the name and code number of which appears only in fine print.

Reserve notes (paper money) are convenient since the holder need not be identified, but they may be lost or stolen. Checking accounts can be used only where the holder may be identified. This protects the depositor against loss or theft. Checking accounts are, therefore, preferred for all larger amounts.



Legal Tender

All paper money and coin of the United States is "legal tender" within the United States for payment of all debts, including taxes. Bank deposits are not technically "legal tender." Since the banks are required to pay checks in legal tender when so requested, the difference is of no practical significance.

Certified Checks

A "Certified Check" is certified on its face by the bank against which it was drawn. Its payment is thereby guaranteed. Traveler's checks are special forms of certified checks.

How Checks Are Paid

The holder of a check may demand payment in any one of three ways: first, he may deposit the check in the bank against which it was drawn; second, he may deposit the check in any one of the thousands of other banks of the country; and third, he may demand payment in paper or coin.

In the first instance, the bank pays by merely subtracting the amount of the check from the account of the drawer, and adding that amount to the account of the payee. Nothing changes except the figures on the books for these two accounts.

In the second instance, where the check is deposited in some bank other than the one against which it was drawn, the bank must have some form of money that will be acceptable to any other bank in the United States.

To meet this situation, the "Federal Reserve" has been established. The Federal Reserve consists of 12 regional banks, each with many branches, but all operating as a unit under the general direction of the Federal Reserve Board. The Board is appointed by the President of the United States with the approval of the Senate. These Federal Reserve Banks are "banker's banks"; that is, they accept deposits only from banks and government agencies. Banks which do business with you and me are called "commercial banks" to distinguish them from the Federal Reserve Banks.

Nearly every commercial bank in the United States has a deposit with the Federal Reserve Banks. Those that do not, have accounts with other banks which do have such accounts. Payments from one bank to another therefore always may be made through Federal Reserve Banks. Federal Reserve Banks settle these accounts between depositing banks in the same manner as do the commercial banks; that is, by subtracting from the account of the payer, and adding to the account of the payee. Again just bookkeeping. Payments from one bank to another can be made through any third bank, with which both debtor and creditor have accounts. Interbank payments are not therefore always made through the Federal Reserve, but always may be so made.

In the third instance, the holder of a check demands payment in paper or coin. It is the custom of all commercial banks to keep in their vaults a ready supply of paper and coin. If more is needed, the bank gets it from the Federal Reserve Banks. The cost will be charged against its checking account.

Silver certificates and coins are issued by the United States Treasury and turned over to the Federal Reserve Banks which, in turn, give them out to commercial banks as requested. Again, the amount is charged against the checking account of the commercial bank.

If a commercial bank has more paper or coin than it needs, it may deposit with the Federal Reserve Bank and have the amount credited to its account there.

The account which a commercial bank has with the Federal Reserve may therefore be used either to pay other banks, or to obtain paper money or coin.

Federal Control of Money

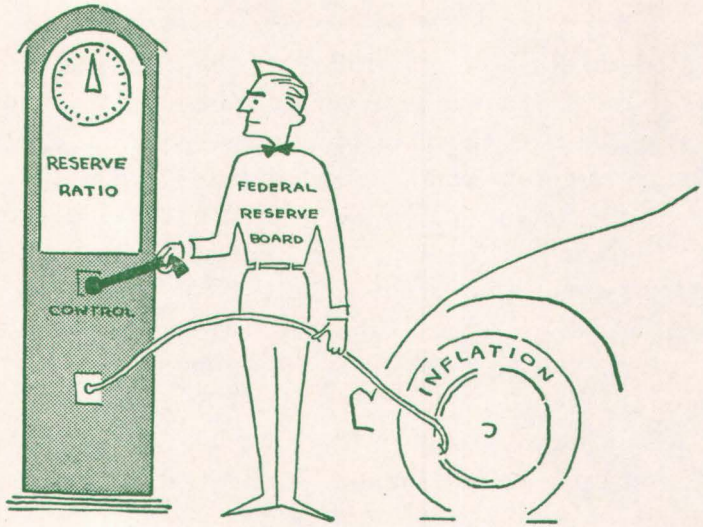
In addition to the functions mentioned, accounts which our commercial banks have with the Federal Reserve Banks serve to give the Federal Reserve control over our entire banking and monetary system. This is a point of great legal and economic significance that demands careful study.

Deposits which commercial banks have with the Federal Reserve are known as the commercial bank's "reserves," but the meaning of the term "reserves" is to be found in banking law and not in the dictionary.

Since these deposits are the key to ability to honor checks with any kind of money, the government steps in to control these deposits ("reserves"), and thereby controls our whole banking and monetary system. Control of the Federal Reserve over our banking and monetary system is exercised in three ways, any one of which is very powerful.

Reserve Requirements

Commercial banks are required to maintain "reserves," in the form of deposits with the Federal Reserve, of not less than specified percentages of the bank's deposits. The Federal Reserve has the power to raise or lower these percentages within rather wide limits, the maximum being two times the minimum.



Acceptable Deposits

The Federal Reserve Bank, like all other banks, uses its own judgment as to the amounts and kinds of notes and bonds that it will accept as deposits from the commercial banks. This action is governed not only by the quality of the notes and bonds offered, but by Federal Reserve policy; that is, whether the Federal Reserve wishes commercial banks to expand their deposits or to contract them.

During the past 15 years, more than 90% of the notes or bonds offered by the commercial banks for deposit with the Federal Reserve have been government bonds—including various forms of government securities. The Federal Reserve cannot question the quality of these government bonds and has accepted them without limit and at the market price. It apparently has the legal authority to refuse to accept government bonds as deposits merely as a matter of policy, but it has never considered it wise to do so. Since the commercial banks have in their vaults several times as many government bonds as they are likely to wish to deposit with the Federal Reserve, commercial banks may increase their reserves at will as long as the Federal Reserve is willing to accept the bonds.

Discount Rates

The Federal Reserve may influence the desire of commercial banks to increase their reserves by raising or lowering the discount rate. This is the rate of interest which the Federal Reserve charges commercial banks for loans and rediscounts. It applies to all notes and bonds offered except government bonds. In the earlier years of the Federal Reserve, the discount rate was very important since the banks had very few government bonds to offer. During and since World War II, the discount rate has been relatively unimportant because more than 95% of the items offered the Federal Reserve by the commercial banks are government securities. The Federal Reserve buys these outright at the market price regardless of the discount rate.

Open Market Operations

Through its "open market" operations, the Federal Reserve may increase or decrease the actual reserve accounts of the commercial banks without consulting them in any way. The mechanics that make this possible are unique and interesting.

By "open market" operations, we mean the buying or selling of bonds from or to the general public. This the Federal Reserve is permitted to do, but it can accept deposits only from other banks. The effect of this innocent appearing limitation is almost magical.

If John Doe buys a bond from the Federal Reserve, he will give the Federal Reserve a check against his local bank. The Federal Reserve will charge this check against the reserve account of the local bank, thereby reducing the amount of that reserve. On the other hand, if John Doe sells a bond to the Federal Reserve, he will receive a check against the Federal Reserve bank which he will deposit in his local bank. The local bank will send this check to the Federal Reserve bank where it will be credited to the reserve account of the local bank—thereby increasing that reserve—all without regard to the wishes of the commercial banks involved.

These powers of the Federal Reserve, as they have developed in recent years, are far greater than are likely to be used or needed. The important thing is, therefore, not the legal limitations of the Federal Reserve under the law but the policies which the Federal Reserve has followed.

Since the country went off the gold standard during the depression, it has been the policy of the Federal Reserve to permit commercial banks to increase their reserves by depositing notes and bonds without limit. During the depression, most banks were short of acceptable notes or bonds. Since the beginning of World War II, however, the commercial banks have owned large amounts of government bonds which the Federal Reserve has accepted as deposits without limit. This means that since the beginning of the war, the Federal Reserve has permitted our banks to increase their reserves at will, retarded only by the fact that commercial banks get no interest on their reserves. During this period of unlimited reserves, our commercial banks have increased their loans and bond purchases as rapidly as acceptable and apparently profitable loans or bonds were available. This actual increase in bank loans and bond purchases from 1938 to 1956 has been from 50 to over 200 billion dollars.

It should be understood that this Federal Reserve practice of giving the banks practically unlimited reserves is a "policy" and not a requirement of law. It may, therefore, be changed or reversed whenever the Federal Reserve considers it wise to do so.

While the enormous legal powers of the Federal Reserve have been used lightly, their very existence gives the Federal Reserve great influence. The slightest hint from the Federal Reserve as to changes in credit policies, reserve requirements, discount rates, or open market operations is given the most careful consideration by the financial institutions of our entire country and even abroad. The changes in reserve requirements and discount rates made by the Federal Reserve in the spring

of 1956 produced psychological effects that far outweighed the compulsory effects.

The government of the United States does not stand alone in its ability to control the money supply of the country. Since th world ceased to use gold as money, the control of the money supply in all countries passed automatically into the hands of the governments. If there are any exceptions, we are unable to find them.

Governmental Objectives

Governmental control over the money supply in the United States, or in any other country, can be used for two very different purposes. One is to regulate the money supply in the long-run interests of the economy of the country; the other is to regulate the money supply in the short-run interests of the government in power. Unfortunately, these two purposes may be conflicting.

Governments must have money, and there are three ways to get it: First, take existing money from the people by taxation; second, borrow existing money from the people by selling them bonds; third, create new money by selling bonds to banks.

The government of the United States has been using all three methods. Taxation is the sound method, but it is unpopular politically. The ability of the government of the United States to borrow from its own citizens would seem to be unlimited. But our government has made a political feature of low interest rates, and this has made it impossible to sell all its bonds to the nonbanking public. It has sold billions of dollars of bonds to the banks, and thereby increased our money supply.

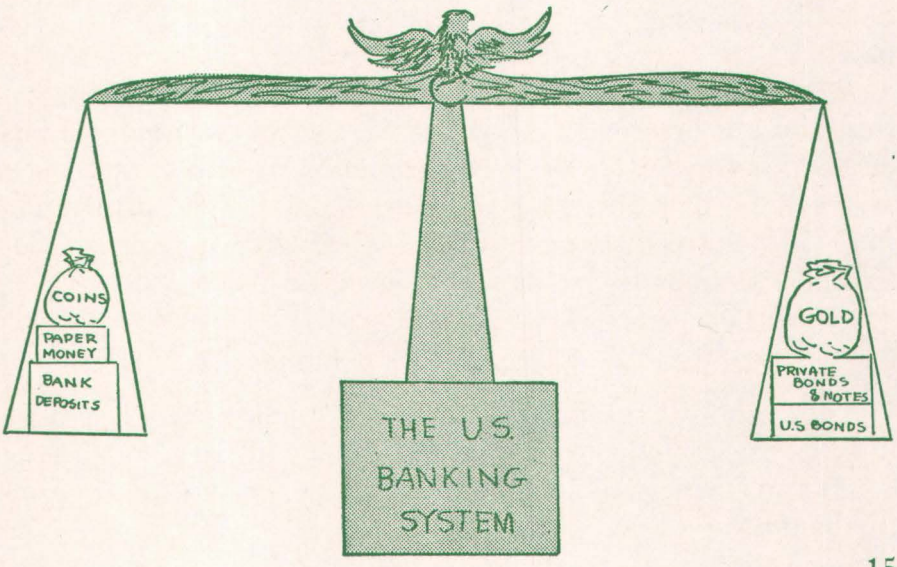
Since banks have more lending power than is needed for nongovernment business, this excess lending power has been used to buy government bonds at interest rates lower than would be possible if the bank had to loan all its funds at that rate.

The policies of the United States in these matters are not new and not unique. History is full of examples, both ancient and modern. During the past 20 years, practically all the governments of the world have been meeting a substantial part of their governmental expenses by creating more money, and commonly to a greater degree than in this country.

Our Monetary Balance Sheet

Since the money of the United States is created by the deposit of gold, notes, and bonds in our banks, we would expect that the total amount of money in the country, aside from the small amount of silver and silver certificates, would equal the amount of gold, notes, and bonds held by our banks.

Actually the amount of gold, notes, and bonds is always somewhat larger than the amount of money for two reasons: First, these notes and bonds draw interest and are consequently increasing in value; second, banks are required to invest a substantial amount of their own capital in notes and bonds so that their holdings of notes, bonds, and other liquid securities are substantially greater than their deposit obligations. Any bank which fails to do this will be closed, and its affairs liquidated by the banking supervisors.



As of June 27, 1956, the banking system of the United States owned the following, in billions of dollars: gold, 22; U. S. Government notes and bonds, 90; nongovernment notes and bonds, etc. 126; making a total of 238. Against this, the banking system has obligations in the form of deposits and Federal Reserve notes of 216.

Since our present monetary system was established 43 years ago, the money supply of the United States, exclusive of the small amount of silver and silver certificates, has varied from 40 to 200 billions. It has always been from 80% to 90% of the amount of gold, notes, and bonds held by the banks.

Current statistics of our monetary balance sheet are published regularly by the Federal Reserve Banks in the Federal Reserve Bulletin under the heading, "Consolidated Statement for Banks and the Monetary System."

Our Monetary System and Banks

While any banker who makes a loan increases his deposits by that amount, he has no assurance whatever that checks against this new deposit will not be deposited in some other bank; in fact, he may be reasonably certain that such will not be the case. In the long run, increased deposits resulting from loans in any one bank tend to be scattered throughout the banks of the country, and shared more or less by all banks. The manager of an individual bank therefore transacts his daily business on the assumption that increasing his loans or his bond purchases will have little or no effect on the deposits of his own bank. On the other hand, if deposits all over the country are increasing, each individual bank has at least a competitive chance to share that increase.

Two Kinds of Credit Money

Our kind of IOU money is called "bank money" because it is created by depositing notes and bonds or gold in the banks, and cancelled by withdrawing notes and bonds from the banks.

It is possible, however, for a government to print paper money with no plan of payment and to force such money into circulation by using it to pay governmental expenses and by making it legal tender for the payment of all debts. We call this "fiat" money, meaning that it is money merely because the government says so.

Fiat money gives the government such an easy way to pay its expenses that it always gets out of control. It has been tried throughout history but results in so much inflation that the money finally becomes worthless and some new kind of money must be adopted. This happened in the 1920's in Germany, Russia, and Austria. At present fiat money is not used anywhere unless it be behind the iron curtain, but it always has its political advocates.

Can These IOU's Be Paid?

The answer is "Yes." These IOU's can be paid by cancellation. If I owe you $100 and you owe me $100, both debts may be settled by mutual agreement to cancel. What the banks owe the public in the form of money is offset by what the public owes the banks in the form of notes and bonds plus the capital and surpluses of the banks. These debts are being cancelled and new ones created every minute.

Actually no one would wish to do away with all bank credit or all bank deposits, and it could not be done without economic disaster.

Foreign Exchange

By "foreign exchange" we mean money or buying power in foreign countries, and particularly the exchange of money or buying power between countries.

In any consideration of foreign exchange, certain basic facts are important.

The money of all countries is now credit money under government control. The amount of money and thereby its buying power is determined by the governmental policies of

the country in question, and that entirely without reference to the policies of any other country. The relative value of any two moneys therefore depends entirely upon their relative buying power in terms of goods and services commonly exchanged between the two countries. This relative buying power changes from day to day.

Most European countries permit their money to be exchanged for foreign money only through authorized governmental agencies and at rates fixed by the government. It is a common practice of these governments to fix the rate at which their money may be exchanged for American dollars at a figure which makes dollars cheaper than is justified by their buying power. As a result the demand for dollars in these countries at the fixed rate often exceeds the supply. If the difference is very great there develops a serious "dollar shortage" and even a "black market." This does not mean that dollars are any "better" than other moneys, but merely that people are trying to get dollars at less than their true value.

If the rate of exchange fixed by any government gets too far out of line with relative purchasing power, international trade will be seriously restricted. Rates fixed by a government must therefore be revised from time to time.

The United States and Switzerland are exceptional in that dealings in foreign exchange are entirely in private hands and the governments do not fix the rates of exchange.

Since the money of each country is credit money, it circulates freely only within that country and not inside any other country. There is, therefore, no such thing as an international money.

There is a keen demand for United States dollars all over the world but the foreigners who receive these dollars do not pass them on as they do their own money; instead they exchange them for their own money with the nearest bank or dealer in foreign exchange. Eventually these dollars go to parties who send them back to the United States in payment of American goods. Persons who cater to foreign tourists usually accept all kinds of foreign money in order to encourage busi-

ness. They may even accept dollars at better than the legal rate. This is of course merely a device to attract trade by cutting prices without appearing to do so.

Very little paper or coin from one country ever goes into another country. Some countries even prohibit the export or import of paper or coin. International tourists use traveler's checks almost entirely.

Dealers in foreign exchange deal chiefly in bank accounts, bills receivable, accepted drafts, traveler's checks, and in fact, in all kinds of credit.

Since there is no international money with which foreign debts may be settled, dealers in foreign exchange must, in the long run, buy as much as they sell. Foreign exchange is handled largely by strong financial institutions that are in a position to extend short time credit in very large amounts. In the long run, however, debits and credits must balance, but keep in mind that foreign trade involves stocks, bonds, interest, dividends, etc., as well as goods and services. These credit items are often spoken of as "invisible" exports or imports. Such items are not only invisible in the physical sense but the transactions may be private and therefore not a matter of public record. No one knows, for example, what American stocks or bonds are owned by foreigners, or by Americans who may be temporarily or permanently abroad.

Summary

The money of the United States consists entirely of special forms of credit. A very small part of this credit, used as money, is issued by the United States government. A very large part is issued by banks. Most of the bank credit used as money is in the form of promises to honor checks, which the customer calls "deposits." A much smaller part is in the form of demand notes which we use as paper money. These demand notes are issued only by the Federal Reserve Banks.

This bank money, whether in the form of promises to honor checks or in the form of demand notes, all originates exclusively through the notes, bonds, and gold which customers have deposited in the banks. The quality of the notes and bonds deposited must be passed on by the examiners of the State or Federal banking departments.

The total amount of bank money is always offset by an even larger total of gold, notes, and bonds in the banks.

The total amount of money in the United States depends, therefore, on the amount of gold, notes, and bonds which we have put into our banks. This in turn depends on three things: first the willingness of you and me and our government to borrow from the banks; second, the willingness of the banks to lend, that is to accept our notes and bonds as deposits; and third, the current policy of the Federal Government with reference to the expansion or contraction of bank loans.

All three of these depend directly or indirectly on the good sense and judgment of the American people as expressed in their business operations and in their votes.

All major countries of the world now use credit money under the control of the government. Transactions in foreign exchange are dealings in credit of various kinds. Very little paper money or coin moves across national boundaries.

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