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A PRIMER ON MONEY

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COMMITTEE ON BANKING AND CURRENCY
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LETTER OF TRANSMITTAL

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC FINANCE
OF THE COMMITTEE ON BANKING AND CURRENCY,
Washington, D.C., July 30, 1964.

To Members of the Subcommittee on Domestic Finance:

Transmitted herewith for the use of the Subcommittee on Domestic Finance of the Banking and Currency Committee is a "Primer on Money," which explains in simple, everyday language how our monetary system works and indicates where it needs reform. For a great many years I have been concerned with the need for more popular information on this very important subject, and, as time permitted over the years, this publication emerged from the notes which I have kept.

Involvement with the Federal efforts to get this country out of the depression in the thirties and with the tremendous war financing problems of the forties as well as my sponsorship of the Employment Act of 1946 has brought home to me the great importance of an adequate and widespread public understanding of money and banking.

While responsible for preparation of the primer, I am indebted to many colleagues throughout the years and to members of the Banking and Currency Committee staff for their valuable suggestions. At the same time, I wish to express my gratitude to a great scholar, Dr. Seymour Harris of Harvard University, whose encouraging sentiments appear immediately following.

It is a source of deep gratification to me that the majority members of the subcommittee voted unanimously to have this primer printed as a subcommittee print, the number representing a majority of the committee.

WRIGHT PATMAN, *Chairman.*

THE PATMAN CRUSADE

By Seymour E. Harris, Littauer professor of political economy, Harvard University (emeritus)

Congressman Patman's "Primer on Money" is a reminder of the unique service which the Congressman has given the American people in the last 40 years. No one has defended the interest of the people more vigorously, more persistently, and more courageously against those who have assumed the responsibility of determining how much money there is to be, at what price, and who is to get it.

In the primer one will find a thoughtful elementary discussion of monetary policy and the relation of monetary to other facets of policy. But the primer contains, also, the Congressman's views on the most controversial issues of the day.

Here, for example, one will find a view well defended and needing to be presented, that the Constitution gives to the Congress, and not to the Federal Reserve or the commercial banks, the power to create money and determine the value thereof. There is more than an implication that the Congress has surrendered its prerogatives too easily.

Patman also reminds us that President Wilson, when confronted with a demand that bankers join in the control of the monetary machinery, made the classic remark: "Which one of you gentlemen would have me select presidents of railroads to be on the Interstate Commerce Commission to fix passenger rates and freight rates?"

In view of President Wilson's philosophy underlying the new System, it is a matter of concern to Congressman Patman that the major policy decisions are now made by an Open Market Committee, with 5 of its 12 members presidents of the Reserve banks, 6 of the 9 directors of each bank being elected by the commercial bankers. I strongly support his proposal that the presidents of the Reserve banks should not be members of the Open Market Committee. The present powers of the Open Market Committee and the membership structure are rightly a matter of concern to the Congressman. Too much power resides in those who are the beneficiaries of the policies.

In 1959, legislation was passed which put billions of dollars of additional reserves at the disposal of the banks. The Congressman reminds us that the impulse to the legislation came from the American Bankers Association. He also reminds us that each dollar of additional reserve yields $5 of additional business for the banks without cost to them; and that one important effect is more business for the banks and less for the Reserve banks, unfortunate because most of the profits of the latter go to the Treasury.

Perhaps on no issue is Congressman Patman more eloquent than on the claim of the Federal Reserve Board and its supporters to the privilege of independence. He shows that the Board has no inherent right to move independently of the Government; that the costs of independence are great; that the justification of isolation from popular pressure, a presumed reason for independence, can as well be applied to tax policy and to many other policy areas.

The Federal Reserve System operates all too often in favor of high money rates which are not justified. Not that Patman wants inflationary policies; but the Fed often seeks higher rates than are supportable by the needs of the economy. And Patman can single out many periods when dear money contributed to excessive unemployment. He is as aware of the relation of high money rates to inadequacy of investment as was Keynes in his famous "Treatise on Money."

Hence I can only salute the Congressman from Texas. He keeps the finance men on their toes. If he sometimes exaggerates the evils and mistakes, it is only because, like all innovators, he recognizes that a little exaggeration is an ingredient for putting a new position over, and especially when the opponents are powerful, numerous, and well organized, and often do not distinguish the financial from the general interest.

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INTRODUCTION

1. Most people, when asked about money, will say that all they know about money is that they don't have enough. This is unfortunate. Money is a manufactured item. The amount of money available to the economy is determined by the manufacturers. And this amount—usually called the money supply—is one of the two or three most important influences determining business activity, incomes, prices, and economic growth.

2. Under the Constitution, it is the right and duty of Congress to create money. It is left entirely to Congress.

3. Congress has farmed out this power—has let it out to the banking system, composed of the Federal Reserve and the commercial banks. Only these two can manufacture money, i.e., currency and demand deposits (checkbook money) which are instantly available to make purchases and pay bills. (Exactly how this system creates money will be explained in the body of the book.) None of the other financial institutions of any nature has this power to manufacture money.

4. The manufacturers of money possess immense power which, if properly used, can work in the public interest. But the same power, if abused, can be greatly detrimental to national welfare. The power has been abused, and reforms are needed to promote the public interest.

5. The ability to manufacture money is the heart of the commercial banking system. Bank profits depend on the lending and investing of bank created money. Banks are given this privilege, of creating the very money they profit from, because they have an important economic function to perform. Banks provide the money which the economy needs to prosper and grow. This money is not unlimited. The banking system can only create so much money at any time. (Who decides how much money can be created, and how the decision is made effective is another subject dealt with in the body of this book.) Since money is limited, someone must decide where the best places are to put the available money and under what conditions. This the banking system does. Bank earnings are the return for the wise and proper placing of the money supply.

6. Individual banks are chartered primarily for the purpose of serving the areas in which they operate. The public interest is served if the bank creates money to satisfy the needs of its area, as far as possible, and help the progress of the community.

For some time now, banks have been forgetting their primary purpose. They have become less and less interested in extending credit to the local businessman or farmer, especially if he is small. They have been reaching out and using their money-creating power to purchase long-term U.S. Government and tax-free municipal bonds. The Government, with its credit rating, doesn't need their money; their local areas do. But purchasing Government and municipal bonds is profitable and requires almost no time or paperwork.

Bankers, like other people, can forget their duties and look at their activity purely from their own, narrow viewpoint—the level of bank earnings. When they do, their obligation to help the people of their area with expanded credit is shunted aside, they are no longer operating in the public interest.

7. Originally, there was a residence qualification for bank directors. They were required to reside within the same limited area where the bank was to operate. The purpose of the requirement was to assure bank operation by local people who had the interest of the area at heart. State laws also required that bank directors live nearby.

These laws have been changed in recent years. Now only a certain number of directors must live in the locality. The others, in some cases, can live outside the State; in other cases, they are not bound by any residence requirements. Still other laws have been altered. Holding companies are now permitted, whose directors may live in another city or State, and who maintain control through local dummy directors. The local bank is then actually operated by absentee owners.

This, too, is a serious matter and requires careful attention. The independent bank, locally owned and operated, is a bulwark of strength in our country. Its disappearance is an abuse and should be stopped. If the present trend continues, the commercial banking system in the near future will be owned largely by absentee owners and a handful of financial centers.

8. The questions at issue do not include whether banks should be permitted to make ample profits from their money manufacturing franchise. Of course, they should. Commercial banks are an important part of our economy. They have served our country well both in peace and war. The required reforms are called for only to assure that banks serve the public interest while earning their profits. The country needs banks and an efficient banking system. And banks must have fair profits to do an adequate job.

9. The Federal Reserve System, consisting of 12 regional Federal Reserve banks and the Federal Reserve Board in Washington, is the control organization guiding the money manufacturing process—as will be explained later. The System was created by Congress and is a creature of that body.

As the ultimate controller of the money supply, the Federal Reserve has immense power. It is widely admitted that its influence on the level of business activity is significant. In fact, an important group of economists believes that the money supply is the main factor causing the ups and downs of the economy.

10. Although a creature of Congress, the Federal Reserve is in practice, independent of that body in its policymaking. The same holds true with respect to the executive branch. The Federal Reserve neither requires nor seeks the approval of any branch of Government for its policies. The System itself decides what ends its policies are aimed at and then takes whatever actions it sees fit to reach those ends.

This independent arrangement raises two major problems. First, in a democracy the responsibility for the Government's economic policies, which so affect the economy, normally rests with the elected representatives of the people: in our case, with the President and the Congress. If these two follow economic policies inimical to the general welfare, they are accountable to the people for their actions on election

day. With Federal Reserve independence, however, a body of men exist who control one of the most powerful levers moving the economy and who are responsible to no one. If the Federal Reserve pursues a policy which Congress or the President believes not to be in the public interest, there is nothing Congress can do to reverse the policy. Nor is there anything the people can do. Such bastions of unaccountable power are undemocratic. The Federal Reserve System must be reformed, so that it is answerable to the elected representatives of the people.

Second, by tolerating an "independent" Federal Reserve, the country is in the position of having two control centers independently trying to guide the economy. The President and the Congress dispose of a major influence over the economy in their power to tax and spend—their fiscal power. The Federal Reserve is the overlord of the money supply. If these two are not steering in the same direction, they can either neutralize each other or have the economy lurching in all directions. This is not a rational system for setting economic policy. It has given us trouble in the past, as the text will establish, and will inevitably in the future.

But even more important than the problem of coordination is that of final control. When the "independent" Federal Reserve clashes with the President and the Congress, whose will prevails? Under the present regulations for appointment and tenure on the Federal Reserve Board, there is no pat answer. For all his power and responsibility for the welfare of the country, the President is not master, even with the approval of Congress, of the country's economic policy.

This is no mere theoretical debating point. Economic policymaking is a matter of choosing where to place the weight of policy. The Federal Reserve and the President sometimes make different choices. An example of that possibility has just occurred. The President and the Congress together fashioned an $11 billion tax cut with the express purpose, among others, of helping to keep the economic upturn alive through 1964 and into 1965. Yet the President found it necessary in his annual economic report to Congress to ask the Federal Reserve not to nullify his efforts to reduce unemployment and raise incomes. Should the President have to ask any congressionally created body to go along with his policy as approved by Congress? Obviously not. The President is elected by the people. He should, by right, have a fair chance to carry out his policies and views. The Federal Reserve may advise and counsel but it must not be allowed to veto. Reforms are needed to achieve this end.

11. Bad as "independence" is, the main fault of the Federal Reserve System—an admirable system if conducted in the public interest—is that too much power and control rests in the hands of people whose private interests are directly affected by the Federal Reserve's actions.

It is indisputable that the commercial banking community wields considerable power within the Federal Reserve. Each of the 12 regional Federal Reserve banks is operated by 9 directors—6 of them selected directly by the privately owned commercial banks. Further, the central decisionmaking body, which decides whether the System will press the accelerator or the brake, is the Federal Open Market Committee. (The Committee and its work are thoroughly discussed in the main text.) The Committee has 12 members. Seven are

so-called public members—the members of the Federal Reserve Board—who are appointed by the President and ratified by the Senate. They represent the public interest. The other 5 members are drawn from the presidents of the 12 regional banks. Each bank elects its own president by a vote of the nine-man board of directors, with six private bank-selected directors on it.

This is not all. When the Open Market Committee meets every 3 weeks in Washington, all 12 regional bank presidents participate in the discussion, though only 5 can vote. The "discussion" committee then consists of the 12 regional presidents and the 7 "public interest" board members. The 12 presidents, of course, are free to persuade as they see fit.

In addition, the Federal Reserve Board confers periodically with a Federal Advisory Council that both advises and consults on business conditions. The board of directors of each regional bank selects one member of the council, and he is usually a banker—representing the bankers of his district.

12. Here, then, is the private banker influence. What does this mean? It means simply that the private banking interests are intimately if not decisively involved in determining the Nation's money supply and, consequently, the general level of interest rates. And interest rates are the very prices bankers charge for the use of their product—money. It means that decisions absolutely crucial to the public interest are arrived at by a body riddled with private interests, and these interests can easily conflict.

13. When the original Federal Reserve Act was being shaped in 1913, President Woodrow Wilson was aware of this conflict of interest. He refused to allow private bankers on any board that would have the power to fix interest rates or determine the money supply. When some prominent New York bankers asked for representation on the proposed Federal Reserve Board, Mr. Wilson asked, "Which one of you gentlemen would have me select presidents of railroads to be on the Interstate Commerce Commission to fix passenger rates and freight rates?"

But institutions evolve. By 1934 and 1935, with Congress totally preoccupied by the cares of the great depression, new laws were passed essentially setting up the Federal Reserve System as it is today: a powerful central bank, as opposed to a conglomeration of regional banks, with a strong private banking voice on the decisionmaking Open Market Committee.

14. The Open Market Committee, as presently established, is plainly not in the public interest. This committee must be operated by purely public servants, representatives of the people as a whole and not any single interest group. The Open Market Committee should be abolished, and its powers transferred to the Federal Reserve Board—the present public members of the committee, with reasonably short terms of office.

Also, the Federal Advisory Committee should be enlarged and reorganized. Members should be chosen for the broadest possible representation of the public interest, their main qualification: ability.

15. It may seem strange, but Congress has never developed a set of goals for guiding Federal Reserve policy. In founding the System, Congress spoke about the country's need for "an elastic currency." Since then, Congress has passed the Full Employment Act, declaring its general intention to promote "maximum employment, production,

and purchasing power." But it has never directly counseled the Federal Reserve.

The Federal Reserve has filled this vacuum itself. The ends its policies are intended to achieve are those chosen by the Federal Reserve—all certainly admirable, but not necessarily those which the Federal Reserve should take on itself to pursue. For example, there have been times when the Federal Reserve has restricted the money supply and raised interest rates to gain an end, which had much better been left to another Government agency or the Congress to attain. The country could have had lower interest rates without sacrificing anything else.

Congress must be more explicit. Guidelines for monetary policy should be laid down. And an annual review of the Federal Reserve's policies should be held by the Senate and House Banking and Currency Committees. Reports should be filed and recommendations made, if any.

16. These criticisms and suggested reforms of the commercial banking and Federal Reserve systems are offered for one purpose: to assure that the needs of the people and their Government are served to the fullest possible extent. The commercial banking system has a clear-cut responsibility to its local area that it must fulfill. The Federal Reserve System can have only one consideration: the public interest. The Nation's monetary system cannot be governed by or for the private interest of any one group.

There is no room in these criticisms for anything that smacks of unsound money. Neither inflation nor deflation is wanted. What is wanted is prosperity and high employment under the terms of the Full Employment Act. Our banking system, possessing the great monetary power of the United States, must serve that end.

CHAPTER I

MONEY AND SOCIETY

What is money? Where does money come from? How is it created? By whom and for what purpose is money created?

Perhaps these questions will seem elementary to some readers. Yet they are questions which many people—the usually well informed as well as others—cannot answer. Money, it appears, is a very mysterious subject.

Other questions of equal importance can be asked. For example, who decides how much money shall be in use at any one time? Or who decides how much will be paid for the use of money? These are questions which most of us never think about. Yet their answers lead directly to the Federal Government in Washington, which keeps constant watch over the amount of money available and the level of interest rates paid for its use. These quantities are no more matters of accident than, say, the number of automobiles produced in a given season. In the one case the Government decides; in the other the managers of the automobile companies.

In other words, deciding what the money supply and the prevailing interest rate will be is as much a part of the public business as any other decision of Government. But in these decisions the general public participates little if at all. Indeed, relatively few people are even aware that these decisions are being made. This is unfortunate because, except for decisions about wars and foreign affairs, the Government makes no decisions more important to our pocketbooks, our jobs, or our businesses.

Consider, for example, what a large part interest charges play in the cost of living. All of us know, of course, that the amount the Nation pays to the farmers is important in the cost of living. Farmers supply all of our food, plus, of course, much of the fibers used for making our clothing. The total gross farm receipts from marketings in 1963 was about $36 billion. In the same year, personal income from interest alone ran almost as high, $33 billion. And then there are the billions of dollars paid in interest to financial institutions which show up in personal incomes as wages and salaries, profits and dividends. Obviously, interest charges are closely linked to our cost of living.

This link is more easily seen by looking at business practice. All business firms have to borrow to conduct their operations—some firms more than others. An increase in interest rates means then an increase in business costs. More money has to be paid out for use of operating credit. Mining companies, smelters, steel mills, manufacturers, distributors, wholesalers, retailers, all pay more for the use of credit which means that costs of the final product are pyramided at each stage of the production and distribution processes. Utility and transportation companies supplying the water, power, communications, and

so on, and transporting the goods to market, also have their costs increased. These cost increases are passed on, at least in part, to the consumer.

So the cost of the goods consumers buy has an element of interest cost fitted in which must be included in prices for profitable operation. Interest is important enough simply as one of the costs of doing business, but is actually more than that. It is also a determining factor of the level of business activity. This is because interest rates affect the rate at which business firms invest in new plants, new equipment, and new inventory. Why do interest rates have this effect? Briefly, because some part of business' annual investment is paid for with borrowed money. And, in the usual case, firms will only borrow this money if the rate of interest is low enough to yield them a profit after all costs, including interest, have been paid. Raise the rate of interest high enough and almost any investment can become a losing proposition. When interest rates are high, then, the incentive to invest is blunted; lower rates sharpen the incentive.

The rate of business investment, in turn, is a major determinant of economic activity. It is the third largest component of expenditure for the country's annual output, ranking next after consumer buying and Government purchases. Interest rates by playing on the incentive to invest greatly influence the rate of total spending in the economy.

This second function of interest, as a lever which jacks business activity up and down, is perhaps even more relevant to everyday living than the first. Consider what happens, for example, when the Government is restricting credit. Interest rates rise as loans become difficult to obtain, even at the high rates. The high rates discourage investment in new plants, equipment, or inventory. Even firms willing to invest despite the high going rate find that banks and other financial institutions will not make the necessary funds available to them. Investment tumbles as firms postpone or cancel their planned outlays.

The small business sector is especially hard hit by such a turn of events. The scarcity of loan funds, more than the cost, plagues small business during a credit squeeze. Because they lack the bargaining power of their larger rivals in dealing with the lending institutions, small business firms cannot obtain their share of credit though willing to pay the going rate. Such firms, which would normally be adding to the country's economic growth, not only cannot grow, but must retrench on their inventories, work forces, and so on, in order to adapt to the credit contraction. Not a few go bankrupt.

Yet these are only the first effects of a credit squeeze. Others occur because of the fact that part of the country's vast productive capacity is at all times geared to produce a certain flow of investment goods. When business brakes investment—and the economy's growth slows—the investment goods industries find themselves over extended and react. For example, when business curtails the building of new plants, new retail stores, etc., the construction industry itself contracts. Construction workers lose jobs and so do the workers in industries supplying building materials. The so-called capital goods industries—industries which produce machinery and the other goods purchased by producers—slump. More workers are laid off. And there is a con-

sequent drop in demand for basic raw materials of industry such as copper, steel, aluminum.

There is also a more subtle "cost" of high interest rates that is frequently forgotten. One of the important ways an economy grows is by becoming more efficient, that is by creating and adopting methods of producing and distributing more goods and services per given amount of labor. In fact, the modern standard of living was made possible only by the continuous increase in efficiency—technically labeled "output per man-hour"—over the past 250 years.

Many things contribute to rising efficiency. One of the most important is the continual invention of new machinery, equipment, or instruments, and the ceaseless refinement of old production techniques. But these improvements are stillborn until business has invested in the new plants and new machinery incorporating the innovations.

Another way an economy grows is by adding to its capacity to produce; i.e., providing its workers with more tools to use in the production process. These additional tools—new factories and new machinery—equip new workers to produce as efficiently as those already employed and extend known efficiencies as far as possible.

When high interest rates choke off investment spending two things happen. The rate of growth of output per man-hour is less than it might have been. And the rate of growth of industrial capacity slackens. In other words, high interest rates today imply less full employment output than otherwise tomorrow, because, first, tomorrow's labor has less equipment to work with than it might have, and, second, this equipment is less efficient than it might be.

These results of a period of high interest are also a "cost," though the cost this time is of lost opportunities to increase tomorrow's income. But the cost is no less real. A smaller output from a given effort is a cost which appears as higher prices or smaller wages. The result is equivalent to a decision today to tax tomorrow's production.

Notice, the payment of this "low growth" tax does not at all depend on the economy being plunged into a recession. Even when the economy is working at full-employment levels, high interest will dull the inducement to invest. Relatively fewer investments will be made, and the output "mix" will be shifted away from investment goods. Efficiency and industrial capacity will grow more slowly than with low interest rates. The economy will still, in this case, be bearing the cost of high interest, though the cost does not appear as falling income and production. It does appear as a production growth rate lower than the labor force growth and normal efficiency gains would have suggested. High interest, therefore, can tax away production by two different and not necessarily connected effects: one, the cutting down of today's production, and two, changing the composition and not the amount of today's output, but restricting the capacity available for producing tomorrow's output.

What may appear, then, to be a simple decision to rein in the money supply and raise interest rates is, in fact, a simultaneous decision about the whole range of economic life—the prices people pay, the incomes they earn, the level of prosperity and the dynamic thrust the economy is permitted to develop. The fallout extends even further. As interest rates rise, a transfer of income also takes place—to the large holders of liquid assets and the large financial institutions. It is no

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accident that rising interest rates are accompanied by a boom in the market for stocks of banks and life insurance companies.

The major owners of these institutions—certainly concentrated among a tiny minority of families in the United States—receive gratuitous additions to their personal wealth as the value of their stock increases. This only reflects the fact that there has been a shift of income away from the interest payers—all of us in our role of consumers—toward the substantial interest receivers—only a relative handful.

Someone might ask, in view of the example, whether high interest is always a burden. The answer is both "yes" and "no." As far as interest is a cost of production or a transfer of income, the answer is "yes." It is always a burden. But there is one case, when the other "costs" of high interest are painless.

Consider the economy when it reached boom levels. Many firms find they were working all out, and an investment boom develops. In these circumstances it is possible that the capital goods producers will find they are unable to produce fast enough to meet the flow of new orders. Backlogs soar; capital goods prices start climbing. If the Government raises interest rates now and depresses investment, only the flow of new orders for capital goods is affected. There is no less of today's production during the time the capital goods makers are working off their backlog. And there is no future loss from any failure to take advantage of any efficiency gains because the economy is producing as many machines and plants as it can with present capacity.

These conditions for a "painless" high interest policy—painless only with respect to forfeited income—are, of course, very special. They only occur during that part of a boom when the economy is running all out and unemployment has dropped to very low levels. And they last only until dwindling new orders start shrinking the bloated backlogs.

With these costs and conditions of tight credit in mind it is possible to consider briefly the total effects of tight money on our economy. For the past 10 years interest rates have been in a broad general uptrend in the United States. What reasons have the Federal officials responsible for this policy given for burdening the economy with higher interest? The words differ as the years pass, but the policy lingers on. In the early years, the reason given was that "too many dollars were chasing too few goods." In later periods, such as the prolonged credit squeeze of 1956–57, it was felt that business was building capacity more rapidly than consumer demand was increasing. In recent years, the balance-of-payments deficit was cited. Higher interest rates were necessary to prevent American capital from going overseas, lured by a favorable return on foreign short-term investments. And throughout this 10-year period there has been constant talk of "fighting inflation" by ever tighter credit restrictions.

Looking at this menu of necessities for tight money, the question has to be asked whether high interest rates were either the only or the least costly way of achieving the desired end. For tight money always costs, sometimes more than others.

In general, the sustained high interest policy of the past decade does not pass the test. There were only two occasions when it could possibly be claimed that the economy reached those boom levels where tight money could operate with the least harmful side effects. There were a

period during the Korean war and, *perhaps*, some parts of 1956. But even if tight money was the best way to deal with these periods, they passed, but high interest rates remained.

Otherwise there is little to be said for the high interest deadweight the economy has been dragging along. As a means of "fighting inflation" tight money is like using a cannon to kill a fly. If it doesn't kill the insect it will at least do a great deal of damage. The modern economy is just not an ideal patient for the tight money treatment for inflation.

As an inflation treatment, tight money is supposed to prevent price increases and maybe, rock back some prices. How?

High interest works by cutting demand for goods and, indirectly, labor. But as everyone knows, prices in most sectors of the present-day economy are simply not very responsive to fluctuations in demand, especially declines. Somewhat sluggish demand, as the steel industry made clear, is often insufficient to halt price rises, let alone force price cuts. And the same statement holds true for labor, which does not forgo wage demands simply because some workers are unemployed.

Tight money, therefore, can only hope to stop inflation—and this means merely keeping prices level—by pressing down hard on demand and keeping significant numbers of people unemployed. With the economy stagnating—and paying the full price of tight money—prices may be kept from rising. They will not fall, because labor will fiercely resist any attempt to cut wages and modern management prefers to accept a fall in demand in preference to a fall in prices. Some sectors of the economy, such as farming, will experience a price slide, but they are exceptional. High interest can fight inflation, then, only by making the economy pay a very high price.

In fact, the poor performance of our economy from the mid-1950's to recent times is precisely what would be expected from a tight credit clamp. Investment has limped along both absolutely and relatively to the level of output. Tight money certainly contributed. The economy's growth fell well below its historic average. And unemployment developed into a major problem again for the first time since the thirties. In a word, the economy stagnated during the prolonged credit contraction.

Of course, tight money was not the only cause of any of those developments. Other factors were also at work. How much of the lost incomes, profits, and jobs should be chalked up to high interest is, then, unknown. But that is not important. What matters is that tight money reinforced any tendency the economy had toward stagnation in recent years.

Fighting the threat (not the reality) of inflation by raising interest rates made sure that the economy would operate for years well below full capacity.

This is not to say that inflation should not be fought whenever price stability is truly threatened. Of course, it should and must be fought, but with the weapons appropriate to modern economic conditions. If the Federal officials responsible for credit policy take it on themselves to be the lonely army holding back a presumed inflation, then the economy is permanently committed to a state of semiparalysis. Here is a case where the treatment is as bad as the illness. The economy is condemned to 5 to 6 and even 7 percent of the labor force permanently unemployed. Costs are raised by pyramided higher interest charges. Opportunities for efficiency gains are permitted to slip by.

Costs and prices, therefore, remain higher than necessary (under a policy of fighting inflation).

There is one more standpoint from which to view high interest—that of the taxpayer.

What does high interest mean to the taxpayers?

High interest means that the Federal Government, as well as the State and local governments, have to pay out more money in interest costs. In one way or another this is money which must come from the taxpayers. The interest cost for carrying the Federal debt is particularly sensitive to a change in interest rates. A large portion of outstanding Government securities is constantly coming due and the Treasury is constantly "paying" these off by issuing new securities. In a period when interest rates are being raised, the Treasury is replacing securities issued at low interest rates with new securities bearing higher rates.

Over the past decade, interest costs for carrying the Federal debt have mounted by huge sums year after year. By fiscal year 1963 the Federal Government was paying out almost $10 billion a year just in interest charges on the debt. This annual cost is about twice as large as it would have been if interest rates had been left at their 1952 levels. Half of $10 billion, or an increased cost of $5 billion, amounts to $26.20 a year for every man, woman, child, and infant in the country. Or, if yours is an average family of five, your share of the increased interest charges amounts to $131.

Add to this the increased costs the average family is paying on interest charges on the State and local debts, increased charges on the home mortgage, increased interest charges for buying an automobile, TV set, kitchen or laundry appliance on time and we see that increased interest rates make a dent in the family budget.

Finally, and perhaps most important of all, the Government's interest rate decisions vitally affect the future of our country in its race with the Communist world. Mr. Khrushchev boasts that the Soviet Union will be outproducing us within a few years and will "plow us under." Though the Soviet Union has stumbled recently, the boast is not to be taken lightly. The Soviet Union has shown itself capable of rapid economic growth. According to estimates made by the U.S. Intelligence Service, the Soviet economy grew at a rate of between 7 and 10 percent a year during the past decade. The Russians will do everything possible to regain that rate of growth. Our economy, on the other hand, grew at less than 3½ percent—its long-term average during the last half of the fifties.

It is pointless to argue about whether the Soviets will actually catch and surpass us in the foreseeable future. The point is that we are in a race that we most certainly do not want to lose, either 20 years from now, or 25 years from now, or ever.

Certainly then, there are good reasons why we should question the wisdom of our Government's following a high interest policy when, as has been shown, one of its effects is to slow down our rate of economic growth.

In any case, in a democracy such as ours it is important that the general public know how its Government functions and who makes the decisions to follow one policy rather than another. The purpose of this book is to explain what money is and how it is created, how the money supply is controlled, and how interest rates are determined.

CHAPTER II

WHAT IS MONEY?

Over the long span of human history, money has assumed many forms and shapes. Different societies, at different times, have been willing to exchange goods or services for:

Seashells	Bricks	Beaver pelts
Whale's teeth	Coconuts	Blankets
Boar's tusks	Cocoa beans	Bronze axes
Stones	Iron rings	Wheels
Feathers	Salt	

In some of the South Pacific islands, great stone wheels served as money. Someone has said that those were the days when the men handled all the money. It took muscle to move a huge stone wheel.

In ancient Greece oxen were money; one ox was the basic money unit. When the Greeks introduced coins of gold and silver, this unit remained the basis for metal money, with each of the various coins worth different fractions of an ox.

In ancient Rome different things circulated as money. When the emperors were firmly established, they issued coins of gold and silver, and, throughout the Empire their subjects used them. In addition, the Romans used pieces of bronze and copper that were not made into coins; Roman merchants had to weigh and test each piece every time they made a sale or purchase. In the early days of the Empire, however, Caesar paid his legionnaires in cakes of salt, not metal, and the Roman emperors did this again, in the later days of the Empire, when they began to run out of metal. This custom may be the origin of the saying that a person is—or is not—"worth his salt."

The point is this: Any number of different materials—including paper I O U's—may serve as money. How money functions, and what money represents, are the important aspects of money. What material the money is made of is not an important aspect at all. In any society, people may use as money anything they wish, provided that they agree with other people throughout the society that the material they are using has the same meaning for all of them.

The question, "What is money?" can be answered briefly: *Money is anything that people will accept in exchange for goods or services, in the belief that they may in turn exchange it, now or later, for other goods or services.*

Later, this book will discuss the various functions of money. Further, it will discuss the reasons why the kind of monetary system we have, and the ways in which it is managed, have profound effects on the amount of real wealth produced and distributed among different families in the country. Here, it is enough to say that an efficient, up-to-date monetary system, properly managed, is essential to a modern, industrial economy.

What did Americans use for money in earlier times?

In colonial times, the earliest settlers used "wampum" more than anything else for money. Wampum consisted of clamshells strung like beads; the settlers considered these beads very valuable, even though it may seem surprising to us that, in our own society, people could have considered clamshells valuable as money. In fact, it must have been surprising to them, too, for these settlers had come from western Europe where they had used and placed their faith in gold and silver, or claims to gold and silver. Nevertheless, the native Indians used wampum as money. When the settlers found that wampum was the most useful material they could have for trading with the Indians, they began to use it for trading among themselves. Wampum had the same meaning for both Indians and settlers: It was "money" for both.

So, in 1637 the government of Massachusetts made wampum legal tender, and fixed the exchange value between wampum of white clamshells and that made of black clamshells. And, in 1641, the New Amsterdam Council fixed the exchange value between wampum and Dutch money; New Yorkers continued to use wampum as their chief currency as late as 1672. As late as 1693, people could pay the ferry charge from New York to Brooklyn in wampum.

It is interesting to note that since wampum beads were generally strung, various ordinances on the subject prescribed that they must be "well strung." Since a string of wampum was a considerable amount of money for fairly large purchases, small purchases were frequently made by counting out loose shells. This may be why people even today say they are "shelling out" money.

Nevertheless, since the colonists did not trade only with Indians, they also used the coins of England, Spain, and France both for trading among themselves and trading with foreign nations. As trade with Europe increased, these coins became their principal form of money circulating throughout the Colonies as if they were locally minted.

In addition, most of the Colonies began to create their own systems of money by minting coins, usually of gold or silver. Some of the Colonies also issued paper money notes, supposed to be "good" for gold or silver coins. This meant that the colonists presumed that their treasuries had in their possession a dollar's worth of gold or silver to cover each dollar of paper money. Frequently, however, this was mere "wishful thinking" on the part of the colonists.

During the reign of George III, his government forbade the Colonies to mint coins—or to issue any other kind of money. This policy, together with the fact that most of the foreign coinage the colonists had been using was eventually drawn away to help England finance the Napoleonic wars, ultimately created a severe shortage of coined or printed money in the Colonies. Some historians claim that the colonists' resentment against this policy was one of the major reasons they finally issued their Declaration of Independence from England.

Thus, despite the fact that the colonists had been using various foreign coins, and despite the fact that they also had been minting their own coins, these forms of money became generally scarce throughout the colonial period. In response to this shortage during the colonial period, and even later, the colonists began to use other, less familiar,

commodities as money: nails, beaver and coon skins, whisky, musket balls and flints, tobacco, corn, codfish, rice, timber, tar, or cattle.

For example, early in their history, the colonists of Virginia, Maryland, and North Carolina adopted tobacco as their money standard and made it legal tender. When plantation owners harvested their tobacco and placed it in the warehouses, to await sale, the warehouse operators issued the owners paper receipts for the tobacco. When the owners made these receipts transferable, they circulated as a principal currency throughout these States. In fact, some of the American people were still using such warehouse receipts to a small extent almost up to the year 1900, long after most Americans had become accustomed to using the lawful money, such as we use today.

The use of tobacco as the basis of money illustrates the difficulties a society faces when it tries to make any commodity—gold or anything else—the basis of its money. When warehouse receipts for tobacco was the principal money in several of the early Colonies, tobacco production was an important economic activity in these Colonies. On the whole, tobacco money, though crude, did serve with reasonable efficiency considering the nature of the times.

But, as might be expected, what happened was that tobacco prices, which were determined in the markets of Europe, changed widely from season to season and year to year. This meant that the value of tobacco money changed relative to other commodities. Where long-term debts were contracted in terms of payment in tobacco money, neither the creditors nor the debtors could be sure what the value of the money would be when the debts were paid. These troubles, which inevitably increased as the economies of the Colonies grew more diverse and complicated, led to efforts on the part of the State legislators first to fix the price of tobacco in terms of European money, then to fix the price of other commodities in relation to tobacco.

What was the money system during the Revolutionary War?

With the Declaration of Independence, the colonists repudiated the rule of England, and with it, the right of King George and his government to regulate their coining or printing of money. To help finance the War of Independence, they permitted the Continental Congress to print and issue great quantities of paper money. But as the Revolutionary War went on, American trade with Europe was interrupted, creating a widespread shortage of almost all kinds of goods. Since the Congress continued issuing more and more "Continental dollars," this paper money rapidly came to be worth less and less. By the end of the war, "Continentals" were so worthless that Americans began using an expression we still hear today. When people now say that something is "not worth a Continental," they mean exactly what the ex-colonists meant: that something has no value in itself—and that there is nothing behind it, to give it value, even as a symbol.

The "Continental" became worthless, however, not only because there were shortages of commodities, but also because it was easy to counterfeit, and the British did exactly that. Further, the Continental Congress actually had neither the power to declare what could be used to pay debts, nor the power to tax. Both of these powers remained with the individual States, until the Constitution was adopted. And the States refused to make good the Continental money.

What has been used for money since the end of the Revolutionary War?

With independence from England established, with the creation of the United States of America as a Nation under its own sovereign rule, and with the adoption of the Constitution as the law of the land, the American people were free also to create their own money system. They could now coin or print money as they saw fit—that is, they could permit their Government to do it for them. But, even after the new Government coined metals and printed paper currency, to some extent, Americans continued to use other things as money, even though they were not lawful tender. The use of tobacco receipts and other kinds of money died out only gradually.

But the Government was not the only printer of money. During the 19th century two other organizations were given the right to print money: State banks and, then, national banks.

What were State bank notes?

Before Abraham Lincoln's administration, the private commercial banks were permitted to issue paper money, today called State bank notes. This meant that any private company that could obtain a charter to engage in the banking business from any one of the States could also print and issue currency, or notes, against the bank. And this was a time when most States followed the "free" banking principle; almost any group which desired to do so could open a bank, and issue notes. The terms and conditions under which these banks issued such notes, as well as the basis upon which they began to do business, depended only upon the requirements of the State where the bank was chartered and the notes issued. And, often the States had few or no formal requirements, to start a bank. Since the value of the notes of any State bank depended upon the reputation of the bank itself, and the reputation of a bank usually was not known outside the locality where it did business, many "frontier" or "wildcat" banks issued paper money with little or no value.

What happened to the State bank notes?

The State bank notes disappeared shortly after the Government passed the National Bank Act of 1863. This act, passed at the request of President Lincoln, provided for a system of private banks which were to receive their charters from the Federal Government and operate under Federal Government regulation. The Federal Government authorized the new national banks to issue national bank notes, also under prescribed rules and regulations. In addition, in 1865 the Government imposed a 10-percent tax on notes issued by State banks which, for all practical purposes, made it impossible for them to issue notes any longer. At that time, President Lincoln said:

> Money is the creature of law, and the creation of the original issue of money should be maintained as an exclusive monopoly of the National Government. * * * The privilege of creating and issuing money is not only the supreme prerogative of the Government, it is the Government's greatest opportunity.

Why did the Federal Government pass the National Bank Act?

The Federal Government intervened in the printing of currency by private banks because this had begun to cause the Nation a great deal of trouble. The United States was rapidly becoming industrialized; trade, once largely local, was fast growing nationwide in scope. Before the National Bank Act, there was no reliable money with a uni-

form value in every section of the country. Obviously, the unreliability of the money supply and its lack of uniformity were serious obstacles to nationwide trade. Moreover, the Nation was being transformed into a "money economy." This means that even then Americans were moving into specialized occupations, in contrast to earlier times when most people lived on farms, and each family produced at home much of what it needed. In a more complex and diversified economy, people gradually began to realize that it would be an advantage to have the Federal Government provide a regulated national system supplying a reliable money to finance the increasing production and trade, in place of the State banks with their separate and unrelated note issues.

What happened to national bank notes?

When Woodrow Wilson set up the Federal Reserve System in 1913, the Government withdrew the national banks' privilege of issuing banknote currency. A relatively small amount (about $37 million) of these notes, is still outstanding, however. People have either buried them away in private holdings, lost, or destroyed them. The U.S. Treasury will redeem them when they are turned in, at the banks.

What are the forms of money in use in the United States today?

Today, the American people use coins, currency (paper money), and commercial bank demand deposits (checkbook money).

Why are commercial bank deposits listed as money?

The reason is that with a checkbook—and some money in an account, of course—anyone can make purchases, pay bills, or instantaneously procure any of the other forms of money—currency and coins. In other words, it is possible to do almost everything with a check that can be done with currency and coins. Not everything, however. People do not offer bus drivers checks when they want change. Only coins and paper money will do. Checks are not freely convertible everywhere into paper money and coins—cashing a check is a problem away from the bank which holds the deposit. But a checking account is so very close to the other two forms of money—representing purchasing power which is immediately available—that students of monetary affairs find it most convenient to include commercial bank demand deposits in the meaning of money. Savings deposits at commercial banks—technically, "time" deposits—are not included. The purchasing power in a savings account cannot be transferred by check.

At the time the Constitution was adopted, bank checks were almost unknown. By 1850, about half of the Nation's money was in the form of bank deposits. Today, about 80 percent of all money is in the form of commercial bank deposits. Currency and coin in circulation outside the Treasury, Federal Reserve System, and commercial banks, and deposits in commercial banks were as follows in the final week of February 1964:

	Millions
Currency and coin	$32,000
Demand deposits in commercial banks	119,700
Total	151,900

What is "legal tender"?

Legal tender is any form of money which the U.S. Government declares to be legal tender; that is, good for payment of taxes and both public and private debts.

Why is our money valuable?

Our money is valuable, primarily, because people will accept it in exchange for goods and services, as mentioned earlier in the chapter. But why will people accept it? And why don't they accept Confederate notes or German marks as well? The answer is the legal status of the dollar. As legal tender, the dollar can be used to pay taxes—it's advisable not to use marks. And debtors can discharge their debts by paying dollars. This is what a court will order debtors to do if they are sued for nonpayment. This makes the dollar valuable to creditors because debtors, wishing to acquire dollars to pay debts, will exchange valuable commodities or services for it.

What are the coins in use today?

Today, the U.S. Government mints pennies, nickels, dimes, quarters, and half-dollars. The pennies, or "coppers," of course, are made of copper. The other coins, however, are made of alloys of metals, the most valuable of which is silver, and the actual metals in the coins are not worth as much as the coins themselves.

Before 1934, the Treasury minted and issued gold coins; it no longer does. The Government enacted a law in 1934 prohibiting the use of gold coins as money, and calling in all gold coins issued before that time, except for the few people have been allowed to keep as souvenirs.

Who issues coins?

In the United States, only the Federal Government may mint and issue coins. Specifically, the U.S. Treasury is the single institution that does so. The Treasury, however, issues coins through the Federal Reserve banks.

What is currency?

Currency is the paper money, or folding money, $1 bills, $5 bills, $10 bills, and the higher denominations. Americans use several different forms of currency today, although few of us notice any difference between them, and in practice, all forms of currency have the same value. At the end of February 1964, the amounts of each kind of currency. "paper" money, in circulation were as follows:

Federal Reserve notes	$31, 107, 000, 000
Silver certificates and Treasury notes of 1890	1, 718, 000, 000
U.S. notes	312, 000, 000
Federal Reserve bank notes	75, 000, 000
National bank notes	37, 000, 000
Total	33, 249, 000, 000

The Government no longer issues Federal Reserve bank notes and national bank notes. When these obsolete notes are turned into the banks, the Government replaces them by one of the other notes or silver certificates, and it then destroys these old notes.

Who issues currency?

In the United States only the Federal Government may print currency. Specifically, the Federal Reserve banks issue Federal Reserve notes. As the table indicates, about 94 percent of all currency in circulation consists of Federal Reserve notes. However, the U.S. Treasury itself did issue some silver certificates and U.S. notes. The Treasury only recently ceased issuing silver certificates. For all practical purposes, only the Federal Reserve now issues paper money.

What backs the Treasury currency?

The Treasury currency in circulation today is largely silver certificates. By law, the Government requires the Treasury to keep on deposit a certain amount of silver to "back" silver certificates. The Treasury must do the same for the Treasury notes of 1890. This means that anyone holding silver certificates can obtain silver for them on demand. The Treasury's legal reserve of silver amounts to about two-thirds the value of the silver certificates in circulation.

What backs the Federal Reserve notes?

Behind the Federal Reserve notes is the credit of the U.S. Government. If you happen to have a $5, $10, or $20 Federal Reserve note, you will notice across the top of the bill a printed statement of the fact that the U.S. Government promises to pay, not that the Federal Reserve promises to pay. Nevertheless, most Americans don't realize what the Government promises to pay: American citizens holding these notes cannot demand anything for them except (*a*) that they be exchanged for other Federal Reserve notes, or (*b*) that they be accepted in payment for taxes and all debts, public and private. Certain official or semiofficial foreign banks may exchange any "dollar credits" they may hold—that is, deposits with the commercial banks—for an equal amount of the Treasury's gold. Americans themselves may not exchange them for gold. But because, in commerce with foreign nations, Americans may pay in gold, gold actually "backs" American dollars.

Who issues "checkbook money"?

The private commercial banks issue "checkbook money." The next chapter will show the mechanics of how they do it, and how the Federal Reserve controls the amount of "checkbook money" they may create. Right now, it is just necessary to see what is meant by saying that the commercial banks create demand deposits, which may be exchanged for currency or coin anytime the depositor wishes.

Imagine there is only one bank in the country and that it has two private depositors, each with $50 in his checking account. Total bank demand deposits would then be $100. Suppose John Jones asked for a $50 loan from the bank, and the bank approved the loan. The bank would then lend the money to Mr. Jones by simply opening a checking account for him and depositing $50 in it. This is what ordinarily happens when anyone—business or private individual—borrows from a bank. The bank deposits the amount of the loan in the relevant checking account.

In making the loan to Mr. Jones, the bank did not reduce anyone's previous bank balance. It simply credited the Jones account with $50. The total amount held in bank demand deposits now becomes $150. The bank has, therefore, issued $50 in "checkbook money."

The natural question to ask is, Where does the bank get the additional $50 to issue and lend to Mr. Jones? The answer, as will become clear in the next chapter, is that the bank did not "get" the money at all. *Money has been created.* Of course, the bank's power to create money is limited. And a later chapter will show that the Federal Reserve sets the limits of this power to create money.

Did the State banks stop creating their own money after the Federal Government passed the National Bank Act?

Although the State banks ceased issuing bank notes, they continued to create money, in the form of bank deposits, just as they do today. In fact, as "checkbook money" has become increasingly popular, State banks have continued to create money in this form. They now create more of this kind of money than before the Government passed the National Bank Act. This act merely stopped the State banks from printing and issuing *currency.*

Who should have the power to create money?

The power to create money is an inherent power of Government. As President Lincoln said:

> The privilege of creating and issuing money is not only the supreme prerogative of the Government, it is the Government's greatest opportunity.

During the past several centuries, various governments in the Western World have, at various times, delegated the money-creating power to private groups or had this power taken from them by default. In these situations, control of the Nation's affairs has been not so much in the hands of the official head of state, but in the hands of the private groups controlling the money system. A famous British banker once summed up the matter this way:

> They who control the credit of the nation direct the policy of governments, and hold in their hands the destiny of the people. (Reginald McKenna, Chancellor of the Exchequer in Britain during the World War I period.)

As we look over human history, we find that the tribal chief, the king, the pharaoh, or the emperor has usually had direct or indirect control of the society's money. In the modern, constitutional governments, one or another branch of the government is given responsibility for establishing and managing the money system. In the United States, the Constitution gives these powers to the Congress.

Does the Constitution, which mentions only the power to "coin" money, give Congress sole power over all money?

Yes. Article 1, section 8, paragraph 5, of the Constitution provides that "the Congress shall have power to coin money, regulate the value thereof, and of foreign coin." It is generally agreed that only the word "coin" was used because there were no banks of issue in the country at the time the Constitution was written, and the Founding Fathers assumed that coins would always meet the needs for lawful money.

Over the past century and a half, many questions about Congress powers over the Nation's money system have arisen, and the Supreme Court has upheld the proposition that "whatever power there is over the currency is vested in the Congress."

In *McCulloch* v. *Maryland* in 1819, the Supreme Court held that Congress has a right to establish the first "Bank of the United States," to give it powers to issue currency, and that the States could not levy a tax on such an instrumentality of the Federal Government.

Years later the Supreme Court held, again, that Congress has the power to charter national banks and also the power to tax the notes issued by State banks—

> not merely because it was a means of raising revenue, but as an instrument to put out of existence such a circulation in competition with notes issued by the Government.[1]

In the famous legal tender cases decided in the 1870's, the Supreme Court held that the Congress has the power to determine what shall be "legal tender," to make currency (that is, U.S. notes) legal tender, even though in so doing Congress overturned private contracts which had been entered into before the law was passed. In short, after Congress passed the Legal Tender Act, creditors were required to accept paper money (U.S. notes) in settlement of debts for which there were contracts calling for payment in gold.

Finally, in the famous gold clause cases [2] of the 1930's, the Supreme Court held that Congress has powers to change the gold value of money and to call the Nation's monetary gold into the U.S. Treasury and to prohibit the circulation of gold money.

How does Congress exercise its power to create money and to regulate its value?

Congress has delegated this power in part to the Federal Reserve System and in part to the private commercial banks. Furthermore, it has delegated to the Federal Reserve System the power to determine how much money shall be created and to determine also—within wide limits laid down in law—what part of the total money supply shall be created by the Federal Reserve and what part by the private banks.

What "backs" the dollar?

As mentioned earlier, from *one* point of view gold can be considered as "backing" the dollar. Certain foreign banks may exchange their dollar holdings for gold, whenever they desire. If, then, in our commerce with other nations, foreigners receive dollars, they know that ultimately these dollars are backed by gold through the exchange rights of the designated foreign banks. (These foreign banks are "central" banks—a term which will be discussed in a later chapter.)

But from a much more basic point of view, the dollar is backed by the credit of the U.S. Government, and, accordingly, by the credit and assets of all its citizens. There is no mystery about this. Most of the U.S. money in existence—currency, coin, and demand deposits—belongs to citizens of the United States. They cannot exchange their dollars for gold or anything else. They can exchange them only for other dollars. Yet, as the Federal Reserve notes show, these dollars are obligations of the U.S. Government. The Government promises to pay. It has placed its credit behind the dollar.

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[1] *Knox* v. *Lee*, 1870, p. 543.
[2] *Nortz* v. *U.S.*, 1935; *Norman* v. *Baltimore & Ohio R.R.*, 1935.

Does money need to be "backed" by some specific commodity?

Because of the long experience of people in the Western World with money "backed" by a specific commodity, such as gold or silver, many people feel that money is good only if it can be exchanged for a given quantity of some specific commodity, usually a precious metal. The fact that a dollar can be exchanged for many types of commodities, including gold in commercial forms, as well as for housing, professional services, and labor, does not always cure their uneasiness. Yet almost anyone who found a gold nugget, or somehow came into legal possession of gold bullion, would sell it. That is to say, he would exchange it for dollars because he could spend or invest the dollars, but not the gold. This raises the question whether it was the dollar which needs or needed to be exchanged into gold, or the opposite.

When was the U.S. dollar convertible into gold?

For almost 100 years prior to 1934, except for 18 years during and following the Civil War.

Did the gold dollar mean that all of the currency and bank deposits could be converted to gold?

Yes; but in theory only. Anybody who actually asked to have his dollars converted to gold would get his gold. But if everybody had demanded gold for his dollars, the story would have been different. There was never enough gold in the country at any time to supply gold in exchange for all of the dollars.

For example, when the Federal Reserve was organized in 1914, commercial bank deposits and currency in circulation amounted to $20 billion, but there was only $1.6 billion of monetary gold in the country. In other words, the amount of money in existence was about 12 times the amount of gold in the country. A similar proportion holds today. (In December 1963, the money totaled $157.4 billion and the Treasury's gold was $15.6 billion.)

Why does the 1934 law make it impossible for U.S. citizens to demand gold in exchange for their dollars?

This law gives us a better money system because it has made the money system easier to manage. In the United States, gold is not needed to carry on our economic activities. Legal tender money, that is, the paper dollar, will buy anything that gold bullion could buy, and more.

And, because the Nation's gold supply was scattered, and buried away in private hoards prior to 1933, the dollar was less reliable in foreign exchange and, hence, more subject to changes in value at home.

Has the United States actually gone off the gold standard?

Yes; except in its international transactions. The "gold standard" usually means that people may exchange their paper money for gold whenever they desire. Today, the dollar can be exchanged for gold only in international transactions, although we still define the dollar in terms of gold. In other words, when we owe foreigners money, they may collect it either in gold or in goods or services.

Did "going off the gold standard" change the basis of our money?

In reality, no. The action which Congress took in 1934 merely formalized what had been true all along, which is this: Checkbook money, which, as we have seen, accounts for about 80 percent of our money, was created on the basis of all kinds of valuable assets. When a bank makes a loan to a business firm, secured by inventories or machinery, it has, in effect, created a dollar based on those inventories or that machinery. Similarly, when a bank makes a loan to a farmer to finance a crop, it, in effect, creates money based on farm commodities. In practice, of course, banks frequently make loans secured not by any specific assets but only by the general credit standing of the company or individual. If the loan is not repaid, the bank can sue and collect its money by forcing the sale of whatever valuable assets the company or the individual may have.

This evolution in the basis of money had taken place long before Congress passed new laws, beginning in 1934, which called all of the monetary gold into the U.S. Treasury and made it impossible for U.S. citizens to convert their dollars to gold.

If we do not have a "gold dollar," what kind of dollar do we have?

We have what is sometimes called a managed paper currency. The dollar is based on credit, and every dollar in existence represents a dollar of debt owed by an individual, a business firm, or a governmental unit. Some dollars have been created in exchange for a claim against such specific assets as the plant or the inventories of a business firm, others have been created in exchange for a claim against the general credit of an individual company or governmental unit.

This paper money is said to be "managed," however, because an agency of the Federal Government—the Federal Reserve System—consciously determines and controls at all times the maximum amount of money which may be created.

Is money wealth?

No. Money itself is not real wealth; it is only a claim to real wealth.

Why do we use money?

Many primitive societies produce only a limited range of goods and often hardly enough of these to meet their day-to-day wants. Such a society can get along without any money. Trade is carried on by barter—that is, goods of one kind are simply swapped for goods of another kind.

But in a modern, industrial economy, barter would be inconvenient, if not impossible. For example, a man working on an auto assembly line might be paid his weekly wages in auto parts. He would have great trouble finding a butcher, a landlord, a doctor, and so on, all of whom happened to need auto parts and would take them in exchange for the goods and services they have to offer. We use money because money makes it easier for a nation to produce and distribute goods and services.

When people accept their incomes in money, rather than in a portion of the goods they help produce, they accept claims to wealth rather than goods which they could neither use nor store and preserve for future use. Thus, money makes it possible for the individuals of a nation to save and for the nation to invest. Investing means, of

course, that all of the nation's current productive efforts do not go into producing goods for immediate consumption, but that a part of this effort goes into producing the tools and other things needed for future production.

It is only because we have a store of tools and other laborsaving facilities accumulated from past labors that our Nation is able to produce a great amount of necessities and conveniences for each man and woman at work. It is only because our industries, our farms, and our various kinds of service establishments are constantly adding to their supply of producer equipment, and are constantly developing still more efficient producer equipment, that our output per man-hour constantly increases.

Why must money by managed?

"Money does not manage itself," is a famous saying of British bankers. It is a saying which Chairman Martin, of the Federal Reserve Board, likes to quote, and it sums up the matter quite well.

Since the purpose of money is to make it easier for a nation to produce real goods and services, easier to divide the income from this production, and easier to save and invest for the future, the money system should be designed and controlled in ways which serve these purposes best. For example, it is very important to have the right amount of money available at all times. Too little money and too much money are both bad.

Since the people, acting through their government, make all the important decisions about money, from what they will use to who will create it, they would indeed be foolish to select a monetary system which leaves the amount of money to chance, or to accidental discovery of gold.

Why is it important for the country to have the right amount of money?

The right amount of money is as important to the economic system as the right number of tickets is to the financial success of a theater performance. The theater has only a certain number of seats. If the manager prints and distributes a great many more tickets than seats, there will be a scramble for seats when the patrons arrive at the theater. And in the long run, of course, there would be a loss of confidence in the theater management and its tickets. On the other hand, if the management prints fewer tickets than there are seats in the theater, there will be empty seats. When the Federal Reserve does not allow enough money to be created, there will be, in effect, empty seats in our economy. Plants do not operate at full capacity, some people cannot find jobs, and real wealth which might have been created is not created. Under these conditions, industry reduces its investment in new and more efficient productive facilities; and the search of scientists, experimenters, and technicians for new and better ways of doing things slows down.

If the official money managers do not permit the amount of money to increase as rapidly as the monetary needs of a growing economy, then growth will be stunted by monetary deficiency—high interest rates—and continuous unemployment looms. On the other hand, an economy can suffer equally from too much money relative to its needs. An overabundance of money by spurring demand presses the economy

to produce beyond its capacity. When this occurs, the extra demand cannot bring about an increase in production, but only an increase in prices. Inflation erupts.

How is the "money supply" defined?

The "money supply" is most usually defined as the demand deposits in commercial banks of the country plus the currency and coin in circulation outside these banks. This is the definition which Federal Reserve officials and most professional economists use when they have in mind a question of how much money is "right" for any level of economic activity.

Demand deposits in commercial banks, plus currency and coin, make up, in theory at least, the total amount of money which could be spent at any one time. Many of us have, of course, money deposited with savings and loan associations, in the hands of life insurance companies, in pension funds, and so forth. Why isn't this money included in the "money supply"? It could be, or at least some of it could, and there are times when economists find it convenient to use a broader definition of money than the usual one. But a moment's thought will show that these excluded types of money—a savings and loan deposit, for example—are not immediately available to make a purchase. A savings and loan account is not a checking account and the depositor first has to withdraw the money from the bank before it can be used. In addition, all the money deposited with a savings and loan association eventually is redeposited in a commercial bank or remains in the form of currency and coin outside the commercial banks. So this money is already counted in the "money supply." The same is true for money going to an insurance company, pension fund or other non-commercial-bank financial institution. Individuals' accounts with these institutions are not included in the "money supply," then, to avoid counting the same money twice.

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CHAPTER III

HOW IS MONEY CREATED?

Where does money come from? This is a question few of us ever think about. Not having thought about the matter, most people tend to assume that money has always been here and that some law of nature guarantees a fixed and unchanging supply of it. In any case, it seems that the less people know about money, the more strongly they feel that the whole subject should be left alone. When any public figure suggests that the money system should be improved in some respect, or perhaps that there should be more or less money, many people react as though he were proposing to meddle with nature or perhaps profane the sacred.

These attitudes, of course, simply reflect confusion about one of the Government's most essential activities. The amount of money in the Nation at any time is as much a decision of Government as anything else the Government does. And this decision is, of course, an important one. It determines the general level of interest charges for carrying a home mortgage or financing a new school or other community facility. It is true that the Federal Government does sometimes make decisions where decisions are not absolutely called for. There are things that should be left alone. But not the money supply. This is something which the Government must decide about. If it did not do so, economic chaos would result.

There are many reasons why the general public doesn't really understand our monetary system. In the first place, money is something that people tend to get emotional about. After all, money involves, and always has involved, something closely akin to faith—which probably explains why in many past societies the money system has been in the hands of a priesthood, the subject of magical rites, and the ceremonial services of the tribe's medicineman.

Then, some of those who do understand the workings of our monetary system seem to feel they are in possession of secrets which cannot be revealed safely to the public. Unraveling the mystery, they feel, would somehow destroy a money system built on exchanges of paper and not "real" goods such as gold or silver. For this reason, it has been traditional for bankers and other private managers of money to cloak the working of the money system with the mantle of secrecy. And many of our high public officials share this view. Although they are appointed to represent the public interest they seem to feel that it would be somehow dangerous to talk about our monetary system in ways that let the public understand who does what, and why. These officials seem very partial to the turns of phrase that imply that the supply of money—and interest rates—are subject to powerful economic laws over which men have no control.

But, of course, money has not always been here. It was certainly not here when the first settlers arrived. Furthermore, the supply of money in the country on any given day has almost always been greater than it was a few years before. For example, in 1914, when the Federal Reserve System was organized, the total supply of money in the country was $12 billion. By 1929 it was $26 billion.[1] If the supply of money in the United States had not grown since 1914, there would not have been enough to accommodate the larger population and volume of production and trade in 1929, to say nothing of today's still larger population and tremendously large volume of production.

Where has the extra money come from? It has been created—manufactured. And not by the impersonal forces of nature, but by men.

In this chapter we will discuss the ways money has been created, as well as the part played by those who decide how much money is to be created.

As might be imagined, our present system of money creation is the result of a long evolutionary process. So perhaps the easiest—and, undoubtedly, the most interesting—way of describing the mechanics of our present system is to begin with some questions and answers about the ancestors of our present bankers, the goldsmith bankers. For they originated the basic principles underlying the modern monetary machine.

Who were the goldsmith bankers?

They were private bankers who did substantially all of the banking business in Western Europe during the 17th century and before.

How did the goldsmiths get into the banking business?

It became customary for people who had gold to deposit it with the goldsmiths for safekeeping. The goldsmith then gave the depositor a "claim check," or a receipt, for his gold. In time these receipts became transferable. Anyone having possession of a receipt was supposed to be able to go to the goldsmith and claim the gold. What actually happened was that these receipts for gold began circulating as money. People learned that they could carry on trade and commerce by passing goldsmith's receipts from hand to hand without ever drawing out the gold. This led the goldsmith to a discovery which has been the principle of banking ever since—"fractional reserves."

What is the "fractional reserve" method of banking?

Few people who held the goldsmith's receipts came in to claim their gold. As the goldsmiths realized this, they also realized that they could make loans of the gold which had been left in their safekeeping. That is, they could write out receipts for gold to borrowers who, in fact, were not depositing new gold but borrowing the ownership of gold already in the goldsmith's possession. This gold—actually the certificates of ownership—being loaned by the goldsmith was not his to lend. He did not own it. But so long as the calls for gold by the original depositors were so infrequent, the goldsmith felt he could lend without undue risk and earn interest on a certain portion of the deposited gold.

[1] Total demand deposits adjusted and currency outside banks.

In other words, the goldsmith wrote receipts for people who were not depositing gold. These receipts too circulated as money. So receipts for more gold than the goldsmith actually had in his vaults were circulating. The goldsmith had only a fraction of the amount of gold needed to meet the claims against him. *This is the fractional reserve system.* In the same way when the banks of the United States kept their reserves in gold, their reserves amounted to only a small fraction of the amount of the money they issued, all of which was guaranteed to be redeemable in gold.

What are the advantages of the "fractional reserve" system?

In the goldsmith period of banking, most Western European governments neglected to provide adequate monetary systems. Frequently, the government controlled the coins, and nothing more. Since this was a period of rapid economic expansion, with the New World being explored and settled, more money was needed than the governments provided. The main advantage of the fractional reserve system, as the goldsmith bankers practiced it, was that it was a source of money for enterprises which the goldsmith bankers considered reasonably safe and sound.

What are the dangers of the "fractional reserve" system?

Under the goldsmith system, the money supply could balloon with the needs for money but the balloon could collapse for reasons that had nothing to do with business' need for money.

This is because the goldsmith banker was at all times "playing the odds," gambling that not all his receipts, or even a high proportion of his receipts would be presented in demand for gold at the same time. If this did happen, he could not, of course, honor the claims on him—because he could not make quick collections from the people to whom he had lent money. The whole structure would collapse. His money, i.e., receipts, would become worthless, individual savings, the deposits of gold he held, would be wiped out; healthy business enterprises would be forced into bankruptcy, when money they had accepted in good faith became valueless; and the whole economic life of the community would, for a time, be paralyzed.

Since most people who accepted the goldsmith's money—except for the more knowing—believed that the goldsmith had enough gold to pay off his receipts 100 cents to the dollar, the mere suspicion that the goldsmith did not have enough gold was enough to start a "run" on the bank and the very collapse which was feared. At one time, a banker of Amsterdam, an important center of European goldsmith banking, proposed a law making it a hanging offense to start a run on a goldsmith. This immediately produced just such a run. Of course, the goldsmith could not pay. The customers ended up hanging the goldsmith.

This kind of disaster was not the only shortcoming of the goldsmith system. A serious problem was posed because the goldsmith's money—his receipts—was usually acceptable only in the locality where he himself was known. Businessmen and traders who wanted to make large transactions in foreign commerce or between regions often made large withdrawals of gold for this purpose. This too could bring about a collapse. Like powerful bankers who came after them, some of the bigger goldsmith bankers were not free of suspicion that

they deliberately precipitated depressions at times. At such times, when business firms were forced into bankruptcy, valuable assets could be bought up at bargain prices by those who possessed sufficient money—or could create it for themselves.

Most of the banking laws and regulations which governments have enacted in the centuries since the goldsmith bankers, have been aimed at safeguarding against the dangers inherent in the fractional reserve system.

What percentage of "reserves" did the goldsmith bankers keep?

No one knows. There were no regulations on the subject, and the question of how many dollars the goldsmith issued on each dollar of gold was left up to the good—or bad—judgment of the individual goldsmith.

The U.S. Chamber of Commerce has widely circulated a little booklet on money which reviews the history of goldsmith banking. In this booklet, the chamber declares the goldsmiths found they could "safely issue $10 for each $1 of gold." This is presumptive history. The bankers in the chamber of commerce have long been agitating to have their required reserves against demand deposits reduced to 10 percent; this has probably influenced, unconsciously, their interpretation of the past.

What became of the goldsmith bankers?

At about the beginning of the 18th century, the governments of Great Britain and the other countries of western Europe created banks—such as the Bank of England—which took over the function of holding bank reserves and regulating the issue of money. Other countries saw the establishment of private commercial banks, which developed into some of the leading banks in Europe today.

Where did the goldsmith bankers obtain their reserves?

As has already been indicated, the goldsmith bankers obtained their reserves when the owners of gold deposits left their gold with the goldsmiths.

Although it is a long historical step from the goldsmith bankers to the present day, the logical development is quite short. For our modern system is only a refinement of "fractional reserve" banking developed so long ago.

Broadly speaking, the modern banking system, as it exists in the United States today—it varies from country to country—is a two-layered system. At the lower layer are the commercial banks where the public's checking accounts are held. At the upper layer is the Federal Reserve System—for convenience consider it as a monetary authority or agency—which creates something called reserves that play the role in our banking system played by gold for the goldsmiths.

What are these reserves? And how do they work as the base of a money-creating pyramid?

Well, in the first place, reserves are money, just like any other money—with one distinction. They are deposits—demand deposits—owed to the commercial banks by the Federal Reserve. (Warning: there are some refinements here about reserves which are being ignored for the sake of clarity. The details will be added later.)

There are, then, two important types of deposits to keep in mind. Ordinary checking deposits kept by the public in commercial banks. And commercial bank deposits—reserves—on the books of the Federal Reserve.

Where do the commercial banks get these reserves? By and large, the vast bulk of the reserves are created by the Federal Reserve and credited to the account of the various commercial banks. *Created* by the Federal Reserve? Yes, and this should not be too much of a mystery, when Mr. John Jones of chapter II and the invaluable goldsmith bankers are brought back into the picture. For the Federal Reserve is the banker's bank. It is the bank which creates bankers' deposits—reserves—just as the bank which loaned money to Mr. Jones created $50 of money, or the goldsmith bankers created circulating paper money when they made a loan. When a bank borrows from the Federal Reserve, the Reserve increases the amount of the bank's reserve account with it by the amount of the loan—and new bank reserves are thereby created. (Where the Federal Reserve itself gets the money to lend or the power to create reserves is another matter, which will be discussed shortly. For the moment, simply accept the existence of a bank which can lend money to—create deposits for—the commercial banks.)

Now the first step into the money fabricating mechanism can be taken. How can an increase in the money supply come about? One way—there are others as will be seen—is to have the Federal Reserve make a loan to a commercial bank. When the Reserve does this, the commercial bank's deposit with the Federal Reserve increases, and the commercial bank is now richer. It has more money, equal to the value of the loan on deposit with the Federal Reserve. Technically, the bank's "reserve account" increases. Its reserve account deposits are "high powered" dollars for they have the power to generate a multiple expansion of money; i.e., currency plus demand deposits.

With an increase in its reserves, the bank can now increase its own lending. And the reason it can is that ours is a "fractional reserve" system, with reserves substituting for the goldsmith's gold. When a bank's reserves increase, it can increase its lending by some amount. And these loans—remember Mr. Jones—take the form of increased demand deposits at the commercial bank—an increase in "checkbook money." So, by an increase in reserves, the money supply can be increased.

Turn from the money supply, for the moment, back to the reserve-creating mechanism. The example of reserve creation ran in terms of a loan from the Federal Reserve to the commercial bank. Actually the Federal Reserve has alternative ways of increasing reserves. A most important one is by the purchase of securities—specifically U.S. Government securities.

This is what happens: When the Federal Reserve buys, say, $1 million of Government securities from a nonbank bond dealer, it gives the bond dealer a check in the amount of $1 million, drawn on the Federal Reserve. The bond dealer will deposit this check with his bank. The bank will credit the dealer's checking account with $1 million and, at the same time, send the check in to the Federal Reserve, where this bank's reserve account will be credited with $1 million. (Again, how the Federal Reserve obtained the $1 million is for later

discussion.) Reserves have increased by $1 million through the securities purchase by the Federal Reserve.

Now let us return to the question of how the money supply increases *after* the Federal Reserve has created new bank reserves.

For the sake of simplicity, it is useful to make a most unrealistic assumption at this stage. Assume there is only one commercial bank in the United States, and that all the commercial banks in existence are actually only branch offices of it. (This assumption will be scrapped quickly enough.) This one bank can increase the money supply by making a loan, i.e., creating a demand deposit. It can also increase the money supply by purchasing a security. For when it purchases a security, from Mr. Smith this time, it writes out a check to Mr. Smith for the value of the purchase. And Mr. Smith? He deposits the check, in the one big bank, which now credits the Smith checking account. Where did the bank get the money for the purchase? Nowhere. It created the money just as it did for the loan. That is, no other deposit was drawn down for the purchase and Mr. Smith's deposit increased. This is the second of the two basic ways—loans or investments—a bank can increase the money supply.

Well, since the bank makes its profits from the interest it receives from its loans and investments, why doesn't the bank simply create an infinite amount of money—making every loan it can place and gobbling up all legitimate securities offered? One reason is that the bank must plan for the possibility that a sizable fraction of its deposit liabilities will be cashed in some day. This limits the deposit-creating process because the bank cannot create 10 times as much in deposits as it has in cash reserves if the fraction that may be cashed in is one-ninth. Additionally in our economy no bank is allowed to do this. For if it were allowed, there would then be no limit to the money supply, and a vital control over our economic system would be rendered useless.

In our money system the Federal Reserve—an agency of the Government—exercises control, by setting a limit to the amount of money the bank can create, a limit that prevails until the Federal Reserve authorities decide on an increase or decrease. There are certain rules of the game written into law, but the Federal Reserve has authority to modify the rules from day to day—within broad limits—as it sees fit.

Under the basic rules laid down by Federal Reserve System, the bank may create several dollars of bank deposits for each dollar of the reserves which are at the moment credited to its account on the books of the Federal Reserve. Let us illustrate what this means with some simple arithmetic.

Say that the Federal Reserve has credited a bank with $5 of reserves. And suppose the bank is permitted to create $10 of deposits for each dollar of reserves.

This would mean that the bank (which, by assumption, recall is the only bank in the country) can now create bank deposits (by making loans and investments) up to the point that deposits reach $50. At this point, the bank could make no more loans or investments—except, of course, to replace previous loans being paid off or to replace securities being sold. Under the rules, the Federal Reserve can impose a fine on the bank if it goes beyond its allotted amount.

This is how the money supply could be increased if there were a

single bank: the Federal Reserve would increase the reserves of the bank, and the bank, having to have only a fraction of its deposits covered by reserves, would increase its deposits by the amount permitted. Now, the one big bank assumption can be dropped and an important refinement added. The discussion of the single bank used the phrase "creating several dollars of bank deposits for each dollar of reserves." This is a perfectly acceptable statement when dealing with the fictional single bank system. But it covers up a somewhat complicated process that takes place in the actual world of numerous banks.

Consider the bank around the corner. Assume it has just borrowed some money from the Federal Reserve—$1,000—or sold a $1,000 security to it. Either way its reserves increase. But the corner bank does not rush out and increase its loans and investments by some multiple of the reserve increase, as the single bank would. Why not?

Here is the refinement. The Federal Reserve limits bank lending by saying that the local bank and, for practical purposes, all commercial banks must keep a certain percent of their outstanding deposits—"checkbook money" held at the bank—in a reserve account at the Federal Reserve bank. Say the limit is 10 percent. And, say, your local bank merely loaned out only the increase in reserves—$1,000—to some merchant. As the merchant used the money to pay wages and bills for merchandise, checks would be going to people who bank elsewhere, out of the neighborhood, and out of the State. When the recipients of these checks deposited them, their own banks would send them to the local bank for collection. How does the local bank pay these other banks? *By transferring money out of its reserve account with the Federal Reserve into the reserve accounts of the other banks.* In other words, banks pay one another by shifting funds from their own deposits—their deposits at the banks' bank, the Federal Reserve.

The local bank, then, would be in a jam if it rushed out, loaned $10,000 on the basis of its $1,000 of new reserves, and shortly found it had to transfer $5,000 to $6,000 of its reserves to other banks. By this process it would lose rather than gain reserves as a result of its loan from the Federal Reserve.

Roughly, what actually happens is that the local bank has some idea, after years of experience, about the percentage of a loan (or a security purchase) which will ultimately wind up at other banks. Say the percentage is 90 percent. Then, with a $1,000 increase in reserves, the bank could lend approximately $1,100. After the drain of reserves and the loss of 90 percent of the newly created demand deposits to other banks the local bank would have approximately $11 in reserves against $110 of deposits which remained at the bank. It could lend no more.

But the local bank has created $1,100 in money—now scattered throughout the commercial banking system. Further, it had fed about $990 into the reserve accounts of other banks who would proceed to lend against their new reserves. They would each go through the same process as the local bank, finally emerging with deposits increased by 10 times whatever the amount of the new reserves they managed to cling to. Eventually, the process would end as the voyaging reserves grew smaller and smaller with each round. In the

end total deposits throughout the banking system would increase by $10,000 and the $1,000 in reserves would be finally distributed. In this fashion, the banking system as a whole does what no bank can normally do: create the multiple expansion of money permitted by a given increase in reserves.

This is the moneymaking mechanism in a nutshell. But there is still one mystery left to unlock. Where does the Federal Reserve get the money with which to create bank reserves? Answer: It doesn't "get" the money, it creates it. When the Federal Reserve writes a check for a Government bond it does exactly what any bank does, it creates money. The only difference is that the Federal Reserve's check ends up an as increase in reserves for the banking system—an increase in bank deposits with the Federal Reserve—as well as an increase in some private bondholder's checking account at his commercial bank. A Federal Reserve purchase creates two increases in deposits at once—a bank's deposit with the Federal Reserve, and a deposit with a private commercial bank.

Unlike the commercial bank, the Federal Reserve does not have any money of its own deposited somewhere else on the basis of which it makes its loans or security purchases. It creates money purely and simply by writing a check. And if the recipient of the check wants cash, then the Federal Reserve can oblige him by printing the cash—Federal Reserve notes—which the check receiver's commercial bank can then hand over to him. The Federal Reserve, in short, is a total moneymaking machine. It can print money, if that is what is demanded, or issue checks. It never has a problem of making its checks "good," because, of course, it can itself print the $5 and $10 bills necessary to cover the check.

Obviously, this power to create and print money could only be given to the Federal Reserve by Congress. This is the case: *The Federal Reserve System is an agency of Congress authorized to create money.*

All of the examples were illustrations of the manufacture of money. But the banking system can also destroy money. The process is the exact reverse of money creation. When a bank repays a loan to the Federal Reserve, it writes a check to the System which "collects" the check by deducting the amount of money from the bank's deposit with the Federal Reserve. The bank's reserves are then decreased and the bank must begin contracting deposits—calling in loans or selling investments—to get back within the permitted deposit limit for its shrunken reserves. And the calling of loans or selling of investments will start a deposit contraction process, the reverse image of the expansion process described earlier.

Or the Federal Reserve can sell a security, say, to Mr. Smith, who writes a check to the Reserve in payment. The System collects from Mr. Smith's bank by deducting the amount of the check from the bank's deposit it is holding. Here again is the reduction in reserves. In turn, Mr. Smith's bank deducts the amount of the check from his deposit. Here again is the first step in the multiple contraction of deposits.

Perhaps it is now clear why the banking system was called a two-layer system earlier in the chapter. Expansion or contraction of the money supply occurs first, through a change in reserves which the commercial banks hold, and, second, by the commercial banks respond-

ing to their changed reserve situation by changing the amount of "checkbook money" outstanding.

With a two-part system, the Federal Reserve can change the money supply by operating on any one of the two layers. For example, it can increase reserves. Alternatively, it can leave reserves unchanged, but can decrease the amount of reserves required to be held against each dollar of demand deposit outstanding. With the "reserve requirement" decreased, the unchanged level of reserves can support a larger stock of "checkbook money," and the banks will proceed to employ their "excess" reserves by making new loans and investments.

All this can be expressed in a formula.

What is the formula that determines the maximum amount of money and credit available to business and consumers?

The formula consists of two parts. One is the *amount* of bank reserves which the member banks of the Federal Reserve System have to their credit on the books of the Federal Reserve banks. The second part is a regulation, which the Federal Reserve Board issues from time to time, telling the member banks the maximum amount of bank deposits they may create per each dollar of their reserve deposit. Expressed mathematically this is a simple formula—

$$A \times B = C$$

where:

A = Amount of bank reserves;

B = Number of dollars of deposits member banks may create per each dollar of reserves; and

C = Total bank deposits.

Can the Federal Reserve authorities change the money supply formula?

Yes. These authorities can change either or both parts of the formula at any moment, and they frequently do change one or both parts. The Federal Reserve Act does specify certain maximum and minimum limits within which these authorities may change either part of the formula, but these limits are extremely wide.

Consider the two-part formula further. Suppose the Federal Reserve has created $100 of bank reserves and has issued regulations which tell the banks, in effect, that they can create $5 for each dollar of their reserves. Bank deposits have thus reached $500. The banks are "loaned up"—they can make no further loans and make no further investments except, of course, as customers pay back their previous loans or as the banks sell some of their securities. Suppose also that the Federal Reserve wishes to permit the banks to expand the money supply—that is, to make additional loans and investments. The Federal Reserve authorities do either of two things: They create more bank reserves, or they issue new regulations, telling the banks they can create a greater number of dollars per dollar of reserves already in existence. If the Federal Reserve wished to double the amount of bank credit available to business and consumers, it could create another $100 of reserves, while maintaining its reserve regulation at 20 percent. The banks could then expand their deposits to $1,000, from the previous $500 simply by making $500 of loans or investments.

Alternatively, the Federal Reserve authorities might issue new reserve regulations, telling the banks they need to "keep" only 10 percent of their deposits in reserves. This would mean that the banks could then create $10 of deposits for each dollar of their reserves instead of only $5 as previously. Consequently, in this way they could also increase their deposits to $1,000, simply by making $500 in loans and investments, although their reserves were still $100 as before.

Whichever part of the formula the Reserve managers decide to alter is totally arbitrary as far as the total supply of money is concerned. But the alternate routes to the same increase in the money supply are not otherwise equal in their effects on the economy.

When the Federal Reserve increases the money supply by lowering reserve requirements, *all* of the new money is created by the commercial banks through their lending and investing activity. On the other hand, when the Federal Reserve uses the increased reserves route, by purchasing a Government bond, some of the money is created by the Federal Reserve. The Reserve-created money is the amount the Reserve pays out for the bond—an amount which is added to the money holdings of the bond seller without drawing down any money holding elsewhere. The rest of the money is created by the banks using their increased reserves from the bond purchase.

This may seem a rather fine technical point to emphasize. But actually it has at least one very practical consequence. The Federal Reserve officials can always decide to create a large portion of any increase in the money supply themselves, though, of course, a larger portion of the supply will always be provided by the private banks under present law. Still the larger portion of Reserve-created money, the more the U.S. Treasury benefits—because all income of the Federal Reserve after expenses reverts to the Treasury. Thus the Treasury receives a good share of the income earned from the Government securities purchased in Reserve money-creating operations.

On the other hand, if the Federal Reserve officials decide that the increase in the money supply they want is all, or substantially all, to be made by the private banks, the private banks acquire and hold more Government securities than in the first case, and the interest payments on these securities go into bank profits.

So, whether the Federal Reserve officials decide to favor the U.S. Treasury or the private banks does make a difference—millions of dollars of difference—in the amount of taxes you, I, and all other taxpayers must pay. After all, one of the biggest items of expense of the Federal Government is the interest it must pay on its debt. We will return to this subject later.

Another technical nicety with important dollars-and-cents consequences is the fact that the Federal Reserve System itself creates high-powered money or bank reserves, just as the banks create customer deposits. This seem to be little understood, even among "experts." In truth, the customary explanation of the source of bank reserves, an explanation appearing even in many college textbooks, has produced much confusion and misunderstanding on the subject.

In explaining how the commercial banks manage to own bank reserves the usual college textbook begins by assuming that "money" comes into being first, in some unexplained way, and is then deposited in a bank. The bank must then take a certain portion of this money

and send it to a Federal Reserve bank where it is kept, in compliance with the reserve requirement. Thus a typical explanation runs this way: John Jones deposits $100 in cash with his bank. The bank is required to keep, say, 20 percent of its deposits in reserves, so the bank must deposit $20 of this $100 as reserves, with a Federal Reserve bank. The bank is free to use the other $80, however, to make loans to customers or invest in securities. The expansion of money thus begins.

This kind of explanation not only leads to misunderstanding, it also leads to misguided Government policies and rather constant agitation on the part of bankers for other such policies. Many of the smaller bankers, who are, on the whole, not as well versed with the mechanics of the money system as they might be, actually believe that they have *deposited a portion of their money*, or their depositors' money, with the Federal Reserve. Thus they feel they are being denied the opportunity to make profitable use of this money. Accordingly, there is always agitation to have the Federal Reserve pay the banks interest on this money which they think they have "deposited" with the Federal Reserve.

Furthermore, they are quite certain that the Federal Reserve System has "used" their money to acquire the Government securities which the Federal Reserve may buy in the process of reserve creation. Believing this, the bankers naturally feel that they are entitled to some share of the tremendous profits which the System receives from interest payments on its Government securities.

Many bankers know better. The leaders of the bankers' associations certainly do. But some of these leaders have not hesitated to play on general ignorance and misunderstanding to mobilize the whole banking community behind drives that are nothing but attempts to raid the Public Treasury.

The truth is, however, that the private banks, *collectively*, have deposited not a penny of their own funds, or their depositors' funds, with the Federal Reserve banks. The impression that they do so arises from the fact that reserves, once created, can be, and are, transferred back and forth from one bank to another, as one bank gains deposits and another loses deposits.

As was shown earlier, if a depositor transfers $100 from his checking account with one bank to another, the first bank loses $100 in reserves and the other gains $100 in reserves. Similarly, when a new bank comes into a banking business, it is required to "deposit" a certain amount of reserves with the Federal Reserve bank, to begin operation. Say the new bank makes an initial deposit of $100 with the Federal Reserve bank. How did the bank get the $100? From the owners of the new bank who probably shifted $100 out of their checking accounts at other banks and paid the sum to the new bank as part of its initial capital. The other banks, of course, lose $100 of reserves when they settle their debt to the new bank. In one way or another, then, this $100 comes out of the reserve account of some bank already in business.

In short, new banks may come into business, old banks may go out of business, and reserves may be transferred from one bank to another in countless ways. But, *nothing the banks can do will increase the total* amount of reserves on high-powered money in the System; and nothing the banks would care to do can decrease the total amount of reserves in the System. Practically speaking, only the Federal Re-

serve System itself can do this. Increasing or decreasing bank reserves is a conscious act of the managers of the Federal Reserve.

Officials of the Federal Reserve System recognize, of course, that the idea that the banks make some kind of physical deposit of money they have received with the Federal Reserve banks to accumulate their reserve is nonsense. For example, Under Secretary of the Treasury Robert V. Roosa, formerly a Vice President of the Federal Reserve Bank of New York, while testifying before the House Committee on Banking and Currency in 1960, described the misconception as follows:

> [T]here is another misconception which occurs much more frequently—that is, the banks think that they give us the reserves on which we operate and that, too, is a misconception.
>
> We encounter that frequently, and, as you know, we create those reserves under the authority that has been described here.[3]

The writer has had a couple of personal experiences which have provided some amusing confirmation of the fact that the source of bank reserves is not deposits of cash by the member banks with the Federal Reserve banks. Having seen reports that the Federal Reserve System had, on a given date, Government securities amounting to approximately $28 billion, I went on one occasion to the Federal Reserve Bank of New York where these securities are supposed to be housed, and asked if I might be allowed to see them. The officials of this bank said, yes, they would be glad to show them to me; whereupon they opened the vaults and let me look at, and even hold in my hand, the large mound of Government securities which they claimed to have and which, in fact, they did have.

Since I had also seen reports that the member banks of the Federal Reserve System had a certain number of millions of dollars in "cash reserves" on deposit with the Federal Reserve bank, I then asked if I might be allowed to see these cash reserves. This time my question was met with some looks of surprise; the bank officials then patiently explained to me that there were no cash reserves. The cash, in truth, does not exist and never has existed. What are called cash reserves are simply bookkeeping credits entered into the ledgers of the Federal Reserve banks. These credits are first created by the Federal Reserve and then pass along through the banking system.

On another occasion, in the spring of 1960, I paid a visit to the Federal Reserve Bank of Richmond, along with several other Members of Congress, and in the course of the visit asked the President of that bank if I could see the cash reserves which the member banks had on deposit with that bank. Here the answer was in substance the same. There is no cash in the so-called cash reserves. In other words, the cash making up the banks' "cash reserves" with the Federal Reserve bank is just a myth.

Just how much in the form of bank reserves has been created by the Federal Reserve System, and what use has been made of them? Officials of the Federal Reserve System have answered these questions on several occasions over the years. One answer was given by the Federal Reserve Board in a letter from Chairman Martin in response to my questions on behalf of the Joint Economic Committee of the Senate and House of Representatives. The answer was given in early 1960.

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[3] Hearings before Subcommittee No. 3 of the Committee on Banking and Currency, House of Representatives, 86th Cong., 2d sess on H.R. 8516 and H.R. 8627, pt. 1, p. 179.

The story, in brief, is this: At the end of 1917, when the first financial report dealing with reserves held at the Federal Reserve System was made, the banks of the System had reserve credits amounting to $1.5 billion.

Between the end of 1917 and the end of 1959, the Federal Reserve System had created gross additions to bank reserves amounting to a total of $47 billion. Over the years the banks had drawn down their reserve accounts by $28 billion, by taking out currency (which was printed to meet their requests), leaving them with a net reserve balance of $18.5 billion.

Let us assume for a moment, just for the sake of analysis, that the $1.5 billion of reserves which the banks of the System had to their credit in 1917 came about through actual deposits of cash by the banks. We may say, then, that in return for this $1.5 billion of cash, the banks have been paid back, in cash $28 billion. They still have left another $18.5 billion in their reserve accounts, a circumstance which entitles them to have outstanding seven times that amount of bank-created money. With this money they have acquired seven times that amount of Government securities and other interest-paying securities and loans.

So far there has been a deliberate haziness—to prevent more clutter than necessary—about the methods the Federal Reserve can use to create reserves. It is time to clear away the fog.

What are the methods by which the Federal Reserve creates and extinguishes bank reserves?

There are four methods. Two of these are carried out by the New York Federal Reserve Bank, acting as agent for the whole System. They are (1) "open market" operations and (2) purchasing gold as agent for the U.S. Treasury. Most reserves are created by these two methods but there are two other methods carried out by 12 regional Federal Reserve banks. They are (3) making loans (usually secured by Government bonds) to commercial banks—specifically "member banks," a term which will be explained later, (4) purchasing "eligible paper" from "member banks" (almost never used).

What are "open market operations"?

"Open market operations" refer to the Federal Reserve System's buying and selling of Government securities in what is called the open market. In these buying and selling operations, the Federal Reserve Bank of New York acts as agent for the entire System. The other 11 regional Reserve banks are later informed of changes in the System's portfolio and, as a corollary, of their respective portfolios. The purpose of buying or selling Government securities is to expand or contract bank reserves and, hence, to expand or contract the amount of money and credit available to business and consumers. In this the Federal Reserve Bank of New York acts to carry out policies laid down by the Federal Open Market Committee, a Committee which will be described in a later chapter.

What is the "open market"?

The so-called open market consists of 21 private dealers in U.S. Government securities with whom the Federal Reserve Bank of New York trades. Several of these dealers are big New York and Chicago banks. The other dealers are firms centered in the Wall Street area,

which specialize in buying and selling securities. The bond dealers, incidentally, may have purchased the bonds from an insurance company, from an individual, an industrial corporation, a commercial bank, or any other financial institution, or from the U.S. Treasury.

How does the Federal Reserve create bank reserves by open market operations?

The step-by-step details are as follows:

Let us assume that the Federal Reserve Bank of New York, acting as agent for the whole System, buys a $1,000 Government bond in the open market. It gives the bond dealer a check for $1,000 drawn on the Federal Reserve Bank of New York. The dealer will, of course, deposit this check in his checking account, say, with the Chase Manhattan Bank. The Chase Manhattan credits the dealer's checking account with $1,000 and then sends the check to the Federal Reserve Bank of New York for payment. The Federal Reserve Bank of New York makes payment to the Chase Manhattan by crediting its reserve account with $1,000.

How does the Federal Reserve extinguish or reduce bank reserves through open market operations?

By selling some of its Government securities in the open market. When the Federal Reserve Bank of New York sells a $1,000 Government bond, the process by which it created $1,000 of reserves is reversed. The Federal Reserve bank sells the bond to a dealer and the dealer gives the Federal Reserve bank a check drawn on his personal bank, say, the Chase Manhattan again. The Federal Reserve bank satisfies its claim by reducing the Chase Manhattan's reserve account by $1,000. It then sends this dealer's check to the Chase Manhattan and the Chase reduces the dealer's checking account by $1,000. Bank reserves are now $1,000 less than they were before.

How much money can the private banks create when the Federal Reserve creates $1 billion of bank reserves or high-powered money?

At the present time the Federal Reserve's rules permit member banks of the Federal Reserve System to create $7 for each $1 of reserves credited to their accounts with the Federal Reserve banks. This means that under the present rules relating to fractional reserve banking, when the Federal Reserve System gives its member banks an added $1 billion of reserves, these banks can create up to $7 billion of new money credited to the accounts of their customers. The banks create this new money by the process already explained.

For whom does the Federal Reserve purchase or sell gold?

Only the U.S. Treasury purchases and sells gold. The Federal Reserve handles these transactions, acting as agent for the Treasury.

What are the sources of the gold purchased by the Treasury?

To a small extent the Treasury purchases newly mined gold. Most gold is purchased from foreign "central banks"—just accept the term for the moment—and, similarly, most of the Treasury's sales of gold are to foreign central banks.

Why does the Treasury purchase gold?

The small amounts of newly mined gold are purchased by the Treasury to add to the Nation's monetary gold stock. Since foreign central banks holding any of our currency may call upon the Treasury to convert the currency to gold, it is important to have enough gold to meet any such claims that may be presented.

But, most of the Treasury's purchases—and sales—of gold are made from and to foreign central banks. These purchases and sales reflect the fortunes of our international balances of payments with foreign countries.

How does the Federal Reserve create bank reserves when it purchases gold for the Treasury?

It is a duplication of what happens when the Federal Reserve purchases Government bonds in the open market. When the Treasury buys either newly mined gold or gold from a foreign central bank, bank reserves are expanded by the exact amount of the purchase.

Here is an illustration: when the Treasury buys $1 million of newly mined gold from a mining company in this country and the checks have all cleared, the mining company has $1 million more in its checking account at the bank. That bank in turn has $1 million more in its reserve account with the Federal Reserve bank. The commercial bank acquires the reserves when the Federal Reserve transfers $1 million from the Treasury's account with the Reserve to the bank. The Treasury, on the other hand, has the gold and it has $1 million less in its checking account with the Federal Reserve bank. If it wishes to replenish its account with the Federal Reserve, it may issue gold certificates—currency which can only be held by the Federal Reserve—against the gold deposits.

The same is true if the gold is purchased from a foreign central bank. In either case, the commercial banks of this country have $1 million more in reserves than they had before. This means that unless the Federal Reserve takes some other action, they can create $7 million of new bank deposits, by creating bank deposits in exchange for securities or loan notes.

How does the Federal Reserve extinguish or reduce bank reserves when foreign central banks purchase gold in this country?

By the reverse of the process already explained.

Is the amount of dollars held abroad greater than the Treasury's gold supply?

Yes; at the present time the amount of dollars held abroad is in excess of the Treasury's gold.

Since foreign central banks can redeem dollars for gold, why don't foreigners turn in all of their dollars in exchange for gold?

Because money in the form of gold draws no interest; it simply has storage expenses. Foreign central banks would prefer to have dollar credits in this country because these can be invested in interest-bearing securities or dividend-earning stocks.

Are total bank reserves reduced when gold goes abroad?

Yes and no. The total amount of reserve available to the banks is decided by the Federal Reserve authorities. Their decision depends upon what they wish the total supply of money and credit in this

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country to be. The Federal Reserve cannot prevent foreign countries from drawing out gold, and thus reducing bank reserves; but the Federal Reserve can make up the difference in bank reserves by purchasing Government securities in the open market.

Does the Federal Reserve create bank reserves by making loans to banks?

Yes; whenever the Federal Reserve makes a loan to a bank it simply creates the money which it credits to that bank's reserve account. However, a relatively small proportion of the bank reserves in existence at any one time represents loans to banks. Under present practices, these reserves are promptly extinguished—usually in no more than 15 days. The Federal Reserve authorities have decided to use this method of making bank reserves available to the banks only on a temporary basis.

Do the banks have an automatic privilege of borrowing from a Federal Reserve bank?

No. Banks of the Federal Reserve System are *eligible* to borrow. But being eligible and obtaining a loan are two different things. In practice the Federal Reserve banks lend reserves to a bank only when that bank is temporarily pinched because it has lost reserves. This policy is implemented not by turning aside banks that seek to borrow once in a while but by not permitting continuous borrowing. In other words, as a bank's customers make purchases and pay bills, and transfer their deposits from one bank to another, a particular bank may gain or lose reserves. If it loses reserves, it will either have to sell securities or call in some loans, to be able to transfer reserves to the banks which are gaining. In these circumstances, the Federal Reserve bank will lend to such a bank, on the theory that, in a few days, it will regain its normal share of reserves. And if the bank is required to call some loans or sell securities, the temporary loan from the Federal Reserve bank gives it time to move in an orderly manner.

How are Federal Reserve loans to the banks secured?

The law permits the Federal Reserve System to accept a variety of good collateral to secure its loans. In practice, however, banks borrowing from the Federal Reserve System almost always put up U.S. Government securities as collateral.

If the Federal Reserve insists on U.S. Government securities as collateral, this does not work any hardship on the borrowing banks since commercial banks generally keep large portions of their assets in Government securities, and the amount of the loans which the Federal Reserve will, in practice, make to banks is relatively small.

Does the Federal Reserve create bank reserves when it buys "eligible paper"?

Yes. When the Federal Reserve Act was passed, Congress intended this to be the main way that the Federal Reserve System would create bank reserves. ("Eligible paper" is a term designating certain kinds of I O U's signed by a bank's customers when they borrow.) When this practice was followed, the banks in a particular area could obtain loanable funds in direct proportion to the community's needs for money. But in recent years, the Federal Reserve has purchased almost no eligible paper. In fact, the Federal Reserve System has

made very little credit available to the banks in the individual districts, including that which they have made available in the form of loans. It is now the practice of the Federal Reserve to funnel most of its credit to the banks through open-market operations in New York.

Do banks of the Federal Reserve System "pay" for their reserves?

No. Bank reserves cannot be paid for by the private banks. They can be shifted and are constantly being shifted to some extent from one bank to another after they are created. But, to all intents, only the Federal Reserve System itself can create reserves, and extinguish reserves.

Sure, when the Federal Reserve purchases a $1 million Government bond and gives some bank credit for $1 million in its reserve account, that bank also credits the bond dealer's checking account with $1 million. In other words, to acquire $1 million of reserves, the bank also assumes a liability to pay its customers $1 million. If the transactions stopped here, the bank would, of course, come out even, neither gaining anything nor losing anything. But the fact that there is now $1 million more of bank reserves than existed before means that the private banks as a group can create $6 million more money than existed before.

In other words, by acquiring this $1 million more in bank reserves, the private banks have the privilege of creating another $6 million of bank deposits, in the process of which they acquire $6 million in interest-bearing securites or loan paper, less an allowance for leakage into the cash (currency) balances of the public.

Bank profits come from the difference between the interest they receive on their loans and investments and the interest they pay their customers on their bank deposits. In 1935 Congress passed a law, sponsored by the bank associations, which finally made it illegal for all banks—with a few unimportant exceptions—to pay their customers interest on demand deposits. Since banks pay no interest on demand deposits we have a clear answer to our question: "Do member banks 'pay' for their reserves?" It is this: When the Federal Reserve provides the banks with more reserves, this automatically enables the banks to make more profits.

Does the money in bank reserves belong to the private banks?

Yes. The banks are privileged to take out their reserves in the form of cash—Federal Reserve notes—any time they choose to do so. Drawing out cash must, however, leave the bank in compliance with the Federal Reserve's regulation as to reserve requirements.

To illustrate, in the example given above where the Federal Reserve bought a $1,000 bond and gave the Chase Manhattan Bank a $1,000 credit in its reserve account, the Chase Manhattan could, if it cared to do so, ask the Federal Reserve bank for its $1,000 in cash—that is, in Federal Reserve notes. In this case, however, the Chase Manhattan's deposit with the Federal Reserve—its reserves—would be no greater than it was before. Neither the Chase Manhattan nor the other banks would be able to expand their deposits.

How does currency and coin enter into the money supply?

The amount of currency and coin in circulation is pretty much automatic. It normally amounts to about 20 percent of the money supply, with bank deposits accounting for the other 80 percent.

The Federal Reserve authorities know how much currency and coin is in circulation at all times; they should, of course, take this leakage into currency into account when they decide how much to add to reserves.

Who determines how much currency and coin is issued?

This depends on the behavior of individuals and business firms. The amount of currency and coins in circulation depends upon how convenient individuals and business firms find coins and currency, rather than bank deposits, in carrying on trade. Money is created first in the form of bank deposits, and most money remains in this form. But as the economy grows and the money supply grows, business and consumers usually find that they want to keep the same percentage of their money in currency and coin. The percentage has been declining somewhat because more people are using checks to make purchases and pay bills.

When someone goes to the bank and asks for currency—"cash"—in exchange for a check, the bank gives him the currency and reduces his checking account by the amount of the check. Then as the bank needs "cash" itself to meet its depositors' demands, it gets the cash from the Federal Reserve by having its deposit reduced. The bank loses reserves, to the amount of the cash, whenever it draws cash from the Federal Reserve. When the public wants cash, then, reserves go down. Of course, the Federal Reserve can adjust for this by creating more reserves during a period of a cash drain on reserves.

Who determines how much "checkbook money" shall be created?

The Federal Reserve System determines the maximum amount of "checkbook money," or bank deposits, which may be in existence at any particular time. Specifically, a committee made up of the members of the Board of Governors of the Federal Reserve System and the Presidents of 5 of the 12 Federal Reserve Banks makes this decision. The Open Market Committee—as it is called—decides only what the *maximum* amount of money shall be; it cannot determine that the maximum amount will actually be created. Money is created when the private banks make loans or investments, and the Federal Reserve cannot force the banks to make loans or investments. It would not be a good policy for it to do so. The bankers make loans and investments only to the extent that they consider they are making sound loans or investments, that will be repaid.

Can Federal Reserve officials help the U.S. Treasury and U.S. taxpayers without increasing the money supply?

Yes—by creating more reserves—that is, by buying more Government securities in the open market—and by raising reserve requirements for the member banks. This means that, for any given supply of money, the Federal Reserve banks would own more Government securities and the private banks would own correspondingly less. This would not entail any change of the money supply, and interest rates would not decline very much.

Is there a practical example of how the Federal Reserve could adopt a policy less favorable to the private banks and more helpful to the general taxpayer?

Yes. Many practical examples could be given.

The table below presents some arbitrary figures which illustrate the effects of two different policies the Federal Reserve might follow, both of which would result in the same money supply—that is, in the same amount of money and credit being available to business and consumers.

The figures given for policy "A," are not drastically different from the facts as they exist today. Furthermore, the figures shown for policy "B" closely approximate the facts—as they might easily have existed if reserve requirements had not been lowered several times during the 1950's. The two sets of figures, and the situations they describe, demonstrate that the Federal Reserve authorities have arbitrarily decided that private banks of the country own $20 billion more of Government securities, and the Federal Reserve banks $20 billion less than they would have, had authorities decided things differently.

How two different Federal Reserve policies make the same amount of money and credit available to business and consumers but determine whether the public or the private banks own $20,000,000,000 of Government securities

[Dollar amounts in billions]

	Bank reserves	Banks' reserve requirements	Amount of money and credit available to business and consumers (bank deposits)	Interest-bearing assets owned by banks (including U.S. Government securities)	Total interest-bearing assets owned by either Federal Reserve or the banks
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)
		Percent			
Federal Reserve's policy "A"	$20	10	$200	$180	$200
Federal Reserve's policy "B"	40	20	200	160	200

Let us note the figures for what we have called Federal Reserve policy "A" and Federal Reserve policy "B" and consider what they mean.

Under both policies the amount of deposits in the commercial banks is the same—$200 billion. Under policy "A," the Federal Reserve has created $20 billion of reserves by, say, purchasing Government securities from nonbank individuals on the open market. When the Reserve does this, it immediately creates $20 billion of demand deposits (and, hence, money) at the commercial banks—deposits which are credited to the accounts of the individuals who sold the securities. This means that along with the creation of $20 billion of reserves, the banks find they have $20 billion of demand deposits against which $2 billion of the new reserves must be earmarked. Only $18 billion of the reserves, then, are free to support deposit expansion. After the commercial banks lend and invest, producing $180 billion in deposits, there will be $200 billion in deposits in the system—$180 billion of which is commercial bank created, and $20 billion Federal Reserve System created.

With policy "B," the same process occurs. Except this time $40 billion of the money supply is created by the Federal Reserve and $160 billion by the private banking system. In both cases, obviously, the total amount of money and credit available to the economy is the same. Under policy "B," the Federal Reserve would acquire and hold $20 billion more of Government securities than it is holding under policy "A." Accordingly, to maintain the same money supply as under policy "A," the Federal Reserve would issue regulations to the banks telling them they must "keep" 20 percent of their deposits in "reserves." This would mean that the banks could create only $5 of money per each $1 of uncommitted reserve generated by the Federal Reserve. The total money supply would, however, be the same, as is shown in column 3.

The big differences, however, show up in columns 4 and 5 of the table. Under policy "A," the Federal Reserve would own $20 billion of assets and the private banks would own $180 billion. The combined assets of both the Federal Reserve and the private banks would be the same under both policies—$200 billion. Under policy "B," however, the Federal Reserve would own $20 billion more of Government securities and the private banks would own $20 billion less.

In other words, the private banks would own a total of $160 billion of interest-bearing loans and investments instead of $180 billion, and the difference would be accounted for by the $20 billion of Government securities acquired by the Federal Reserve.

The point to remember is that this $20 billion of Government securities will be acquired by creating money with which to pay for them—whether by the Federal Reserve or by private banks. It is a question of whether the Federal Reserve itself should create the money, in which case it would return the interest to the Treasury, or whether it should instead make it possible for the private banks to create the money, in which case the interest payments go into bank profits.

What is more, when private banks acquire Government securities, the taxpayers not only have to pay the interest on these securities over all the years the securities are outstanding, but, if and when the Federal debt is ever reduced, the taxpayers will also have to repay the principal amount of these securities.

On the other hand, it is unlikely that the total money supply of the country will ever be reduced substantially, and, therefore, unlikely that there will ever be any need to reduce bank reserves. This being true, the $20 billion of Government debt would remain permanently in the hands of the Federal Reserve—and the taxpayers would not be called upon to pay either the interest or the principal.

In a sense the Government has paid off its debt when the Federal Reserve acquires the security. Specifically, the Government, in effect, exchanges a non-interest-bearing obligation for an interest-bearing obligation when the Federal Reserve acquires a Government security. We will demonstrate this in the next two questions.

What is the amount of U.S. Government securities owned by the Federal Reserve System?

As of January 31, 1964, the Federal Reserve System owned U.S. Government securities amounting to $32,753 million.

How is the Government paid for the securities purchased by the Federal Reserve?

When the Federal Reserve buys Government securities, it pays for them by giving some bank or banks credit on their reserve accounts. The banks may take these credits in cash—that is, Federal Reserve notes—at any time they care to do so.

The amount of Federal Reserve notes which the Federal Reserve has issued and has outstanding is approximately equal to the amount of Government securities it owns. On January 31, 1964, the Federal Reserve had $33.9 billion in Federal Reserve notes outstanding which had been used for its $32.8 billion of Government securities, plus some part of the gold which the Treasury has acquired. In addition, there was $17.5 billion in bank reserves on the books of the Federal Reserve banks which the banks can convert to Federal Reserve notes if they care to do so. In other words, by buying Government securities, the Federal Reserve System has, in the long run, exchanged a non-interest-bearing obligation of the Government (a Federal Reserve note) for an interest-bearing obligation of the Government (a Government bond or other interest-bearing security).

What amount of Government securities have the private banks acquired with bank-created money?

On January 31, 1964, all commercial banks in the country owned $62.7 billion in U.S. Government securities. The banks have acquired these securities with bank-created money. In other words, the banks have used the Federal Government's power to create money without charge to lend $62.7 billion to the Government at interest.

However, it is not possible to say what part of the total amount of money the commercial banks have created has been used to acquire Government securities. After a bank creates the money to buy a Government security, it may then sell the security and use the money to acquire a non-Government security or to make loans to its customers.

On January 29, 1964, commercial banks had total assets amounting to $304.7 billion, and all of these had been paid for with bank-created money, except $25.4 billion which had been paid for with their stockholders' capital. In other words, less than 10 percent of the banks' assets have been acquired with money invested by stockholders in the banks.

If the Government can issue bonds, why can't it issue money and save the interest?

A few clearheaded and firm individuals, such as Abraham Lincoln, have insisted that the Government can.

The late Thomas A. Edison once stated the matter this way:

If our Nation can issue a dollar bond it can issue a dollar bill. The element that makes the bond good makes the bill good also. The difference between the bond and the bill is that the bond lets money brokers collect twice the amount of the bond and an additional 20 percent, whereas the currency pays nobody but those who contribute directly in some useful way.

It is absurd to say that our country can issue $30 million in bonds and not $30 million in currency. Both are promises to pay: But one promise fattens the usurers, and the other helps the people.

To a small extent the Government does issue money, to buy back the bonds it has already issued, through the Federal Reserve System. However, it has long been one of the political facts of life that private banks must be allowed to create the lion's share of the money, if not all of the money. Thus there is little opposition to the Government's printing bonds and then permitting the banks to create the money with which to buy those bonds; but proposals that the Government itself create the money instead of the bonds have always set off tremendous political upheavals. Bankers are politically very powerful, even in wartime. For example, Abraham Lincoln set off a political furor when he insisted upon having the Government issue $346 million in money (the so-called greenbacks) instead of issuing interest-bearing bonds and paying interest on the money.

What would the Government have paid in interest costs if the "greenbacks" issued in Abraham Lincoln's administration had been issued as bonds?

Abraham Lincoln's administration issued a total of $450 million in "greenbacks," or "U.S. notes," as it was authorized to do by an act of February 25, 1862. If instead of issuing "greenbacks," the Lincoln administration had issued interest-bearing bonds, as urged, naturally, these bonds would still be a part of the Federal debt today. Assuming that the Government had paid an average 5-percent interest a year on this amount of bonds, it would have paid out $2.3 billion by 1964, or approximately five times the amount of money the Government would have borrowed. It is a fallacy to think, as many do, that the "greenbacks" were inflationary. In the only sense that matters, the relative or comparative sense, they were not. That is, $450 million in "greenbacks" is no more or less inflationary than $450 million in bank deposits or any other bank money created to pay for $450 million in interest-bearing bonds.

If the Government issued more money instead of Government bonds, isn't there a danger that the Government would issue too much money and cause inflation?

Once again, it is no less inflationary for the private banks to create $1 billion of new money to buy $1 billion of bonds than it is for the Government to create $1 billion of new money. Furthermore, an agency of the Government, the Federal Reserve System, decides in any case the total amount of money to be created, and this is what determines whether we have inflation.

What is "printing press money"?

All money used in this country and in most countries of the world is of two types. One is "printing press money," which is money printed by the Government. The other type of money in use is "pen-and-ink money." Pen-and-ink money is created by the private commercial banks each time a bank makes a loan, buys a U.S. Government security, or buys any other asset. Printing press money is engraved on special paper and with special inks; and it costs about eight one-thousandths of 1 cent per bill, whether a $1 bill or a $10,000 bill. Pen-and-ink money is created by a private banker simply by making ink marks on the books of the bank. However, in recent years many of the banks have installed electronic office machines which make the en-

tries in the banks' books; so someday we may come to refer to bank-created money as "office machine money" or perhaps "Univac money."

When commercial banks don't create money to buy Government bonds, where does the purchase money come from?

When an individual or a business firm other than a commercial bank buys a Government bond, or any other security, the money comes out of savings. In other words, no new claims to wealth are created and the money spent by the borrowers is money saved by the lenders.

As we have previously pointed out, only the Government and the private commercial banks create money. Money lent by individuals, insurance companies, mutual savings banks, building and loan associations, credit unions, and industrial and commercial firms comes out of savings. Whatever individuals and these firms lend reduces the amount which they have left to spend.

What determines how much of their reserves the banks will take out in cash?

No bank would normally take its reserves in cash except to the extent that it has to do so in order to meet the demands of its customers for cash, and, of course, to have a small amount of cash on hand so as to be able to meet its customers' demands on a day-to-day basis. Historically, the reason why the banks do not like to take their reserves in cash is that for each dollar they reduce their reserve accounts by taking cash, their privilege of creating money, to acquire income-producing assets, is reduced.

What would happen if the customers of a bank all demanded to have their deposits in cash?

The bank would be in much the same difficulty that the goldsmith bankers got into when their customers came in and demanded the gold. As we have seen, in the average bank today, customers' claims for cash—that is, their deposit balances—amount to about seven times the bank's reserves. Even if the bank drew out all of its reserves in cash, it would have only one-seventh enough money to pay its depositors. The difference between a member bank of the Federal Reserve System and the goldsmith bankers, however, is that the Federal Reserve will come to the rescue of a bank which gets into such a difficulty and lend it enough reserves to pay off its customers.

CHAPTER IV

WHY WAS THE FEDERAL RESERVE ACT PASSED?

Passage of the Federal Reserve Act in 1913 was only one of the many steps taken by the Federal Government over the years toward creation of a stable and reliable money system—though undoubtedly the most notable.

In the last chapter, the Federal Reserve appeared in many guises. One was as a banker's bank; i.e., a bank which gave credit to the commercial banks and also held their deposits—their official reserves. In other dress, the Federal Reserve acted as the regulator of the money supply through the System's dual power to create reserves and circumscribe the commercial banking system's ability to manufacture money. A bank which performs these and other related functions is called a central bank, for obvious reasons.

Most of the important nations of the world—and many of the others as well—have a central bank whose main purposes are: Exercising the government's powers to create and manage the nation's money supply; determining the general level of interest rates which business and consumers pay; and handling settlement of the nation's debts with other nations. The central banks of various nations either create all of the nation's money or supervise and regulate its creation by private banks. Since they are organs of the central governments, they are, with few exceptions, owned and operated by the governments.

By definition, the Federal Reserve is a central bank. But, as might be expected, it has distinctive features arising out of American traditions and history that are not found in other major central banks. First, it was established as a decentralized system of 12 separate regional Federal Reserve banks, under a Board of Governors in Washington. Furthermore, the framers of the System intended the 12 regional banks to be largely independent of each other in determining the money supply of the various regions of the country. The regional economies were considered insulated enough from each other to require distinct money supplies. This belief was fortified by the traditionally sharp commercial rivalries among the regions and by a general resentment everywhere directed against financial control emanating from "Wall Street."

Another homespun feature of the American Central Bank is that membership in the Federal Reserve System is not compulsory for private commercial banks except for national banks. As a matter of fact, however, commercial banks which do belong to the System—not surprisingly called member banks—hold roughly 85 percent of the assets of all commercial banks, member and nonmember.

The United States established a full-fledged central bank only after more than a century of trial and error with banking systems that proved inadequate to the needs of a surging economy. The Federal Reserve Act was a response to these historical experiments and their

aftermath. Its architects had specific aims consistent with the form and spirit of American democracy when they drafted the system. An all-too-brief excursion through the country's money and banking experience before the Federal Reserve Act helps illustrate the goals of the President and Congress in enacting the Federal Reserve legislation. It is against these goals that the growth and performance of the system can best be measured.

The idea of a central bank was not a novelty by the early 20th century. The advantages of a central bank had been demonstrated for almost two centuries in several European countries. The outstanding example was the Bank of England, established as early as 1694, which enjoyed a high reputation throughout the world.

The Federal Reserve was not the first central bank of the United States; the United States had experimented briefly and half-heartedly with a central bank early in the 19th century. Both the First and Second Banks of the United States had been chartered by the Federal Government, with authorization to combine the functions of central and private banking. Although the Government had a minority interest in both banks, they were predominantly under private ownership and control. The charters were granted for limited periods, however, and, as events proved, public opinion in the United States was ill disposed to both banks because private ownership and control were widely believed to constitute unjustifiable special privilege.

Andrew Jackson's famous attack on the Second Bank culminated in his militant refusal to extend its charter in 1836. This ushered in a long period in which the Federal Government did almost nothing to provide the Nation with a money system. And, until the beginning of the Civil War banking anarchy prevailed. The number of State banks tripled between 1834 and the beginning of the Civil War and so, too, did their deposits and note issues. In some States, notably New England, laws and voluntary associations did give the local State banks safety and stability. But elsewhere, banks began operations and issued currency on little more than the promoter's high hopes.

By the 1860's, the Federal Government found it necessary to reenter the money system. Specifically, in 1863 and 1864 the Federal Government enacted the National Bank Act, creating a system of private national banks which were to receive their charters from the Federal Government, operate under Federal supervision, and issue currency of a uniform value under certain limitations and safeguards imposed by Federal law.

Interest in a uniform currency, where a bank note issued in one part of the United States would be acceptable in another, was spurred by the changes taking place in the scope of industry and trade: when the nationwide system of railways was completed and very large manufacturing plants began to appear, the Nation had moved into an era of nationwide trade. This is why there were high hopes that the national banks would provide both a national currency and a stabilizing force against the periodic money panics and breakdowns in the banking system which more and more were disrupting the whole economic fabric.

A national currency, of sorts, was realized. But, the country was to learn by repeated and bitter experience, instead of being free of bank panics and depressions, it was to be afflicted with increasingly

serious bank panics and bank-intensified depressions. As the 19th century economy developed into a complex money economy—and checkbook money replaced circulating currency—the chronically deficient banking system turned into a costly and tragic extravagance.

At the most general level, the trouble with a banking system, haphazardly thrown together in a loose bundle of individual State and National banks, derived from the fractional reserve principle, wild and untamed.

Money panics and disorders have blemished the history of fractional reserve banking, often leading to serious breakdowns, depressions, and crashes in the general economy.

It is undeniable that, where the fractional reserve technique is practiced, no individual bank standing on its own, without other sources of funds available in an emergency, can pay cash to a large proportion of its depositors if it is suddenly called upon to do so. For example, today the average bank has deposits equal to about 7 times its reserves and, therefore, cannot promptly pay off more than about 15 percent of its deposits in cash. The average bank would be severely embarrassed if called upon to do so. Indeed, the average bank would be greatly embarrassed even if asked to pay much less than 15 percent of its deposits. Obviously, if a bank had paid off 15 percent of its deposits, it would have to use all its reserves for this purpose. This would leave it with no remaining cash, and no source of ready cash, to carry on its normal banking functions for the depositors accounting for the other 85 percent of its deposits.

This does not mean that the average commercial bank today is an unsafe place for depositors' money, or that bank operations are as risky as the above figures would suggest. On the contrary, we are simply saying that a fractional reserve system stands in need of a fireman ready to come to the rescue of any individual bank which suddenly loses a large portion of its reserves, through demands for cash or through depositors' transferring their deposits to other banks.

Furthermore, most banks today own large amounts of Government securities and other highly liquid assets as a "secondary" reserve which can be promptly sold for cash if it is necessary.

Before the Federal Reserve Act, money panics, bank crises, and depressions had been set off by the very dangers just described. Banks were called upon to meet depositors' demands for more cash than existed in the banks' cash reserves. An individual bank in pre-Federal Reserve days, after exhausting its cash reserves, could only close its doors and begin to slow process of liquidating its loans and investments in an effort to raise enough cash to meet the rest of its deposit liabilities. But one bank's closing is, as the record shows, likely to set off a chain reaction in which more and more banks are caught up in the same difficulty. A run on the second, third, or fourth bank proves these banks can no more raise immediate cash, after the reserves go, than the first bank could.

Even those banks on which no run has been made begin calling their loans—preparing for the worst—and this too contracts the money supply and adds to the difficulties of all concerned. In the general rush to convert investments to cash, market values fall and the first bank which set out to liquidate its investments can, by now, do so only at considerably less than at 100 cents on the dollar in-

vested. Moreover, some bank customers have by now been forced into bankruptcy and cannot repay their loans, so the banks cannot fully repay their depositors. Depression and unemployment ensue, with a prolonged interruption in the production of real wealth, until confidence is restored, all because of a breakdown in the money system which is designed, presumably, to facilitate the production and distribution of real wealth.

Aside from a "Neanderthal" fractional reserve system, our pre-Federal Reserve monetary system suffered endlessly from its inability to provide the necessary money for the country's growing volume of industry and trade on a methodical basis. The ability of the State banks to create deposit money depended on the dollar value of their "reserves," usually gold. The amount of deposit-money dollars a State bank could manufacture for each dollar of reserve depended entirely on the laws of the particular State in which the bank operated.

National banks, permitted to create both deposit money and national bank notes, were also limited in any expansion by the amount of their gold reserves. The amount of notes and other liabilities the national banks could issue or assume was tied to gold—at times to both gold and silver—and the amount of Government bonds which happened to be outstanding. (National banks could only issue their notes against Government bonds which they deposited with the Comptroller of the Currency.)

This meant that the total money supply of the country—supplied by State and National bank deposits as well as national bank notes—grew unsystematically, unresponsive to the amount of goods and services being produced and traded and to the cash needs of the time. Accidents in the discovery of gold, import-export flows of the precious metals and fluctuations in outstanding Federal debt combined to run the money mills at an uncertain and varying tempo.

With a nonsystem such as this, seasonal or periodic demands for cash—aside from any longer run monetary needs of the economy—created recurrent nightmares. Harvest time was always a period of money stringency. At harvest time the banks in agricultural areas of the South and West withdrew funds which they usually left on deposit, directly or indirectly, with New York banks, in order to finance the movement of farm crops and to supply local merchants with the extraordinary amounts of hard cash needed for settling accounts at the harvest season. This perfectly ordinary transaction would send a shudder through the whole banking system.

The problem was rooted in the peculiarity of the reserve requirements under the national banking system, which resulted, paradoxically, in the simultaneous scattering and "pyramiding" of reserves. Country banks had to maintain reserves equal to 15 percent of their deposits (both demand and time); Reserve city banks—banks in cities of moderate size—and central Reserve city banks in the large cities, had to maintain reserves equal to 25 percent of their deposits. Although theoretically these reserves were cash, country banks were permitted to count their deposits held at big-city banks as reserves, up to three-fifths of the required amount; and Reserve city banks could do likewise, up to half of their required reserves. The central Reserve city banks had to keep their full reserves in cash. The con-

sequence was that little pools of unused cash reserves were scattered throughout the banking system.

At the same time, there was a persistent heavy cash flow to the New York banks, which acted as correspondents, and paid attractive rates of interest on the banks' funds deposited with them. These New York banks then used these funds extensively for "call loans," in the money market.

The "call loans" tied the banking system to the stock market. "Call loans" were loans usually made to brokers and speculators in the stock exchange on the understanding that the bank could call for their repayment on 24 hours' notice.

When the New York banks had reason to call a large volume of their outstanding loans to brokers, a scramble for funds ensued and, naturally, stocks fell. Sometimes speculators and others dumped their stocks in a rush for cash to cover their loans and a panic followed which left both brokerage firms and banking houses bankrupt.

When demands for cash arose in the country at large (as was the case at harvest time), the country banks put a squeeze on the city banks; and the city banks were compelled to call their loans. This inevitably resulted in a sudden contraction of the money supply, with accompanying hardships and inconvenience. The problem was made even worse because many perfectly sound banks preferred to close their doors rather than use their cash reserves to meet the demands of their depositors, apparently because of the heavy legal penalties applied to a bank which let its reserves fall below the legal minimum.

With this reserve arrangement, the money industry acted in humpty-dumpty fashion. The money supply—meaning the total of cash and deposits—contracted at the moment people wanted to hold more of their money in cash, making all forms of money difficult to obtain. And banks went into bankruptcy with cash reserves intact rather than be penalized for using their reserves to satisfy their depositor creditors.

Sometimes monetary expansions financed large speculative activities which, as a rule, led to "busts," bank failures, money contractions, and general depressions. Speculations in land, in mines, railroads, guana, sugar, cotton, and the abuse of credit to finance fraudulent stock issues, all played their part in triggering money panics and depressions. Between the end of the Civil War and passage of the Federal Reserve Act, the country suffered four major panics, famous not only for the widespread suffering then entailed, but also for the speculative activities which seemed to have set them off. These were the panics of 1873, 1884, 1893, and, finally, the panic of 1907 which led to a widespread sense of public outrage, to investigations, and ultimately to passage of the Federal Reserve Act.

There was considerable public suspicion that the periodic money panics were brought on by deliberate manipulation or corrupt practices on the part of large money interests. Subsequent investigations proved, that these suspicions were not always groundless. Indeed, corrupt practices were not confined to years of panic. The panic of 1873 followed several grandiose speculative schemes and the corruption of both Members of Congress and individuals having exceptional influence in President Grant's administration. For example, two famous money barons of the day, Messrs. Gould and Fisk, had set about to corner the gold market. It appears that these gentlemen

elicited the help of President Grant's brother-in-law in this project, persuading him that it would be a good thing for the whole country if the price of gold could be made to go up. As an incidental item, these gentlemen invested $1.5 million in gold mining shares, on the brother-in-law's account, so that he might participate in the country's expected gains.

It was not, however, until the panic of 1907 that the public generally began demanding banking reforms and investigations to see what was wrong. That panic had its origins in a sort of financial warfare between two of the country's large, private money groups. Specifically, the so-called Standard Oil group set about to break a bank, the Mercantile National Bank in New York City, in which a rival financial power, one Mr. Heinze, was heavily involved. The Standard Oil people had developed a personal animosity toward Heinze over a contest for control of copper mining in Montana. Heinze won this battle and forced the Standard Oil people to buy his copper interests at what was considered an exorbitant figure—some $10.5 million.

Heinze used the proceeds of this sale to acquire control of the Mercantile National Bank, and then proceeded to make heavy investments of the bank's funds in the stocks of a new and more or less fictitious copper company. The Standard Oil people, aware of the risky enterprise in which Heinze was engaged, quietly invested large sums in these same stocks, then dumped the stocks on the market at a crucial moment, breaking both the price of the stocks and Heinze's bank.

Perhaps the breaking of this one bank was all that was intended; but as we can well understand from the nature of banking in that day, the crash of one bank was likely to, and often did, precipitate runs on other banks. Such was the result of the crash of the Mercantile National Bank; the whole country was thrown into a depression.

When reports of trouble at Heinze's bank reached the newspapers, runs on other New York banks were triggered. Great and respected financial barons of the day immediately issued reassurances that all was well. The Secretary of the Treasury rushed from Washington to New York to deposit some $35 million of Government funds with the other banks of that city, in an effort to prevent further collapse and the spread of panic. But the publicity given these events appears to have stirred more panic. It spread to the stock market in New York City and to commercial banks all across the country. Hundreds of millions of dollars went into lockboxes and other private hoards. In some cities legal tender money was sold at a premium.

In New York, J. P. Morgan took command, called the banks of the New York Clearing House Association together, and secured from them pledges of mutual assistance. The panic was finally broken when President Theodore Roosevelt approved a proposal that the New York Clearing House Association issue $100 million in "certificates" which were to function as money. The obvious remedy to panic lay, in a rough way, with a principle which was to support the Federal Reserve System. Meanwhile, however, industry and trade in the Nation had been seriously disrupted, causing unemployment and widespread hardship.

It might be added that in the course of the panic of 1907, Mr. Morgan won President Roosevelt's consent, the antitrust laws notwithstanding, for the Morgan steel interest, centered in the United

States Steel Corp., to acquire and merge the southern steel industry, centered at Birmingham.

On the tide of public indignation aroused by the panic of 1907, Congress authorized investigations, in 1908, by a national monetary commission headed by Senator Nelson Aldrich. The results of the study were published in more than 20 volumes; in 1912, Senator Aldrich introduced a bill to establish his proposed reforms. The main reform proposed was a central bank, with powers to regulate banking; the central bank was to be privately owned and privately controlled.

Meanwhile, however, the House of Representatives had begun a separate investigation, that made by the famous Pujo committee. Intimate facts unearthed for the Pujo committee gave the public a picture of a "money trust," a network of holding companies and other interlocking relationships which gave a small group of Wall Street tycoons control not only of all of the big banks of New York City, but of most of the financial power in the whole country. There was wide public demand for a new central system of maintaining bank reserves and for regulation of the banking system. And the demand was for a public body, not one under Wall Street control. Indeed, public sentiment was then opposed to any single central bank, because of the possibility that a single bank might come to be controlled, or unduly influenced, by special interest groups or by the financial interests of some particular section of the country.

There were then three glaring weaknesses of the monetary system as this brief account of banking before 1913 illustrates. First, it was less a system, than a nonsystem. Each individual bank stood alone, no stronger than itself but quite capable of weakening all the others. The only reserves a bank could call on were those it owned. A rush on one bank's reserves might bring the bank down, with dire consequences for the entire banking structure, even though all the banks together held enough reserves to satisfy the first bank's creditors and more. Panic could be stopped at the source if all the banks together did what no one bank could do—"mobilize" the pools of existing reserves.

The idea of mobilizing reserves was simply this: Whereas previously reserves, which were then mostly gold, gold certificates, and coin, were scattered about the country in the vaults of the individual banks, any new system should draw all of these reserves into one place where they would be readily available for lending to any particular bank, or banks in any particular part of the country, that might be called upon for exceptional amounts of cash. Furthermore, it was expected, and rightly so, that such a system would increase public confidence in banks, and that many people who had previously preferred to hold gold and silver coins would deposit these coins with the banks, thus increasing the amount of gold reserves which the banking system would have.

A second flaw of the monetary industry was that the money supply was too inflexible. In the accepted phrase, the country needed an "elastic currency." Cash drains occurred with monotonous regularity and the nonsystem was incapable of meeting the challenge. Banks could not get cash as they needed it without withdrawing reserves, and, of course, somewhere along the line monetary contraction would set in as the reserve base flowed out through the cashier's window.

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There had to be a source of reserves, which provided the short-run wherewithal just to keep the machinery of a monetary economy functioning. (That long-run needs should also be provided for was a utopian consideration, given the need to erect a workable system, any workable system.)

As a final fault, bank practices followed a crazy quilt of State and National standards. Since the banking system was not much stronger than its weakest banks—crashes and runs due to imprudent management flashed through the system shocking everyone—some minimum enforced standards were necessary. This entailed some central supervisory body to enforce reasonably sound practices, safeguarding against insolvency and loss of the depositors' money.

President Wilson summarized the situation drawing on the findings of the Aldrich committee as follows:

> We must have a currency, not rigid as now, but readily elastically responsive to sound credit, the expanding and contracting credits of everyday transactions, the normal ebb and flow of personal and corporate dealings. Our banking laws must mobilize reserves; must not permit the concentration anywhere in a few hands of the monetary resources of the country or their use for speculative purposes in such volume as to hinder or impede or stand in the way of other more legitimate, more fruitful uses. And the control of the system of banking and of issue which our new laws are to set up must be public, not private, must be vested in the Government itself, so that the banks may be the instruments, not the masters, of the business and of individual enterprise and initiative.

Other—subsidiary—purposes were to be served by the proposed reforms. These were: to provide a more uniform nationwide regulation of banks, particularly their power to create "checkbook money," and also to provide a system by which the banks could clear checks promptly and uniformly throughout the Nation. This corrected one flaw in the National Bank Act: although the act had provided that currency have uniform value the country over, an individual bank would often clear a depositor's check drawn on another bank only at less than par—that is, the bank would return the depositor less than 100 cents on each of the dollars he had deposited.

The reforms eventually settled on regional-central bank legislation. And the bank that emerged, the Federal Reserve System, was unmistakably an American animal. By reason of strong public opinion in the Western and Southern parts of the country—stirred by the Pujo committee findings—the Federal Reserve Act of 1913 established 12 separate regional Federal Reserve banks—a decentralized system—each having more or less independent powers. At the same time all 12 banks were joined in a monetary pipeline through which bank reserves could be shunted to one part of the country or another as the need arose.

While the Federal Reserve proposals were being considered and legislation drafted, the struggle over private versus public control of the system continued. President Woodrow Wilson and Senator Robert L. Owen, chairman of the Senate Banking Committee, supported public demands for an agency under public control. Private bankers, on the other hand, found their views expressed in the Aldrich proposal for a centralized private bank and fought a last-ditch fight for private control. In the end, some compromises were made. The private commercial banks were given control of the 12 regional Federal Reserve banks; that is, they were given the privilege of elect-

ing two-thirds of the directors of the banks, and these directors, in turn, selected the presidents and other chief officers of the banks.

At the same time, however, the functions and duties assigned the 12 Federal Reserve banks were largely defined by law. It was not contemplated that they would have much discretionary power over the money supply. Both increases and decreases in the money supply were to be "automatic"—that is, in proportion to the "needs" of trade and commerce. (Because the word "needs" is subjective, the money supply was never regulated automatically but rather controlled and sometimes perversely as will be shown.) Private banks would continue to create money—and to extinguish money—as before, but under safeguards prescribed by law and Federal Reserve Board regulations. A member bank requiring funds to meet the needs of industry and commerce in its locality was to be able to obtain the funds from the nearest Federal Reserve bank by discounting "eligible paper" with the bank. (Discounting means reselling to the Federal Reserve a commercial bank's loan agreement with a customer at a price less than the bank actually loaned the customer. How much less is governed by the discount rate.) "Eligible paper" was defined by law. It represented bank loans made to farmers, merchants, and other businessmen. The next chaper will explore the money supply provisions further.

The discount rate, on the other hand, was subject to the review and determination of the Federal Reserve Board in Washington, a public body consisting of members appointed by the President of the United States and confirmed by the Senate. The minimum amount of reserves which member banks of the System were required to keep on deposit with the Federal Reserve banks was prescribed by law, being left to the discretion of neither the Board nor the regional banks. Other regulations to safeguard the banks against dangerous and imprudent practices were to be promulgated by the Board, in accordance with the general guidelines specified in law.

Commercial banks were not compelled to become members of the System. All national banks must, as a matter of law, be members. But banks chartered by the States may join the System, or withdraw from the System, as they choose—though to be a member of the System a bank must meet certain minimum standards prescribed by the Board of Governors and otherwise comply with the Board's regulations. This feature of the law was a concession, not to the popular view which distrusts control by big financial groups, but to a large body of popular opinion which distrusts Federal control. Framers of the Federal Reserve Act hoped, however, that all, or substantially all, State banks would join the System, because of the quite substantial advantages which membership in the System was expected to offer.

One of the main advantages of membership was prompt collection and payment of checks—between banks—and at the face value of the check. Difficulties and delay in check collection and payment—particularly between banks located in different cities—was not the least of the defects of the pre-1913 money system; check clearance between banks was subject to the same difficulties which attended note issues of the various banks before the National Bank Act when notes of the various banks were of varying values and questionable acceptance. In short, weeks might pass before a check drawn in one city on a bank

in another would be ultimately settled. Individual banks frequently refused to accept checks drawn on a distant bank, and, as noted, even more frequently checks were accepted only at a discount. In brief, commercial demands for improvements in the system of checkbook money were, in large part, responsible for passage of the Federal Reserve Act.

Were any emergency measures taken before the establishment of the Federal Reserve?

Some emergency measures adopted during panics are worth mentioning because they further illustrate the nature of the problems that had to be solved.

The New York Clearing House and other private clearinghouses—which cleared checks for their members—adopted the expedient of issuing clearinghouse loan certificates. When a bank had to meet an unfavorable clearinghouse balance, it could turn over securities instead of funds to the clearinghouse. The clearinghouse then issued loan certificates secured by these obligations and used the certificates to pay the local banks having credit balances. Later on, if the banks that had received certificates had unfavorable clearing balances, they could use the certificates to meet their deficiences. This device increased the amount of funds available for meeting out-of-town withdrawals. Its significance lay in the fact that banks could thus obtain additional funds (if the certificates could be termed funds) on the basis of their earning assets without having to sell those assets.

The clearinghouses also printed scrip, like certificates but in a form that could be paid out over the banks' counters and used as currency by the public during the monetary shortage. The clearinghouses, in effect, were creating reserve money, however primitively.

The Aldrich-Vreeland Act of 1908, passed after the panic of 1907, contained a provision based on the same principle as the clearinghouse loan certificates. This act provided that 10 or more national banks could form a national currency association to issue notes, secured by the deposit of bonds (other than U.S. Government bonds) or of commercial paper (or of both) with the association. These notes could be issued in amounts equal to 70 percent of the market value of the securities (90 percent of the market value with municipal bonds). To make certain that the notes would be retired as soon as possible, they were subject to a graduated tax, 5 percent a year for the first month that the notes were outstanding, then, by gradual increases to 10 percent at the end of the first year. Nearly $400 million of this kind of currency was issued between the outbreak of war in Europe in July 1914 and August 1915, preventing any possible panic from ensuing. However, the law was allowed to expire in 1915 because of the establishment of the Federal Reserve System.

How was the Federal Reserve System an improvement over its predecessor?

The Federal Reserve System was specifically designed to solve many of the weaknesses inherent in the precedent system.

(1) By requiring the banks to keep their "reserves" with the district Federal Reserve banks rather than with other private banks, the Federal Reserve banks acted as the Nation's central bank. This made it

possible to convert these reserves into currency in times of difficulty, something not possible under the system of pyramiding reserves.

(2) The Federal Reserve System was also a decentralized central bank, located in 12 regions throughout the Nation. This was designed to reduce the concentration of the money mechanism in New York City and the dangers of such concentration.

(3) It was hoped that virtually all the banks in the Nation would join the Federal Reserve System, thus providing uniform regulations for all banks. But this did not transpire. Even today over half of the banks in the Nation are not members of the System.[1] The first effort to bring most banks under uniform regulation and control had occurred in 1863 with the passage of the National Bank Act, but it was unsuccessful. A second unsuccessful attempt was the Federal Reserve Act. A third such venture meeting greater success was the Federal Deposit Insurance Act of 1933.

(4) The Federal Reserve's check-clearing operations proved a major benefit to commercial banks. It significantly reduced the time required to clear checks drawn on banks outside the city of the payee.

(5) Further, the Federal Reserve System was designed to provide an elastic currency. This was to be accomplished through the rediscounting process. By making funds available through the discount window, both cash and the total money supply could expand in accordance with the business needs of the community. But recall this is not a clear-cut criterion and may even lead to perverse money supply changes.

How is the Federal Reserve System organized?

The three basic parts of the Federal Reserve System are the Board of Governors, the 12 Federal Reserve banks, and the approximately 6,100 private commercial member banks. In terms of policy determination, however, the most important group is the Federal Open Market Committee.

(1) *Board of Governors.*—There are seven members of the Board of Governors. They are appointed by the President for terms of 14 years, with one term expiring each 2 years. Each member receives a salary of $20,000 a year, except the Chairman of the Board, who receives $20,500.

(2) *Federal Reserve Banks.*—There are 12 Federal Reserve banks, located in the following cities: Boston, New York, Philadelphia, Richmond, Atlanta, Cleveland, Chicago, St. Louis, Dallas, Kansas City, Minneapolis, and San Francisco.

(3) *Private member banks.*—As of June 29, 1963, there were 6,058 commercial banks which were members of the System. About 4,500 of these are national banks chartered by the Federal Government under the act of 1863. Such banks are required to be members of the System. The remaining 1,500 member banks are chartered by the various State governments. State-chartered banks may join the System if they desire and if they meet the requirements of the act and the supplemental rules laid down by the Board of Governors.

(4) *Federal Open Market Committee.*—The Federal Open Market Committee consists of 12 members: the 7 members of the Board of Governors plus five of the 12 presidents of the Federal Reserve banks.

[1] Remember, though, that member banks account for about 85 percent of total deposits.

Because it is the most important and powerful group in the System as far as monetary policy is concerned, the next chapter is devoted to this Committee and the market through which it operates.

What are the operations of the Federal Reserve System?

There are three basic types of operations of the Federal Reserve System: routine operations, regulatory operations, and policy operations.

(1) *Routine operations.*—Perhaps the most significant of the routine operations of the System is that of clearing checks. Federal Reserve officials have estimated this accounts for upwards of 40 percent of the total cost of the System.

As the situation now stands, the check-clearing service is open to nonmember as well as member banks, though banks which are not members of the System clear their checks through a member bank. Another important routine function of the System is that of furnishing currency. The Federal Reserve banks are charged with getting all the currency issued in the United States into the hands of the private banks and, thus, the public. The Federal Reserve banks also act as fiscal agent for the U.S. Government by issuing all notes and bonds of the Federal Government. Also in the routine category is the contact with foreign central banks. This is handled through the Federal Reserve Bank of New York. Finally, the Federal Reserve banks hold the reserves of the member banks.

(2) *Regulatory operations.*—The Federal Reserve has two basic types of regulatory operations. First, it regulates the number of banks which are in the System by fixing the requirements for membership. Second, the Federal Reserve periodically examines the books of State member banks to see that these banks meet the requirements for operation of member banks laid down by the Board of Governors. National banks are periodically examined by the Comptroller of the Currency.

(3) *Policy operations.*—The most important aspect of Federal Reserve operations in terms of well-being of the national economy lies in the determination of monetary policy. The Federal Reserve has the power to determine the money supply and thus strongly influence the level of economic activity and the general level of interest rates. It controls the money supply through its control over the reserve requirement of member banks and by controlling the amount of reserves available to these banks. Although the Board of Governors has a variety of methods for controlling credit, the most important method—determination of the amount of member banks reserves—is in the hands of the Federal Open Market Committee. Operating in the open market is the essential tool of our monetary policy. Other controls available to the Board of Governors include: changing the rediscount rate, changing the reserve reqirement, and changing the margin of cash payment required on stock market investments.

What are the sources of revenue of the Federal Reserve?

By far the largest single source of income of the Federal Reserve banks is interest on holdings of U.S. Government securities. In 1963, interest on Government securities accounted for 98.9 percent of the total income of the Federal Reserve. Income to the System from dis-

counts and advances is very small. Sources of income and the main items of expense of the System in 1963 were as follows:

TABLE 1.—*Earnings and outlays of the Federal Reserve banks, 1963*

Earnings:	
U.S. Government securities	$1,138,167,465
Discount and advances	8,865,844
Foreign currencies	2,039,600
Acceptances	1,728,755
All other	318,396
Total, current earnings	1,151,120,060
Expenses:	
Salaries	106,788,827
Other operating expenses	62,848,828
Federal Reserve currency	10,062,901
Board of Governors	7,572,800
Total, current expenses	178,273,356
Dividends paid to private commercial member banks	28,912,019
Paid to U.S. Treasury	879,685,219

Source: Federal Reserve Bulletin, February 1964.

How much of the Federal Reserve's earnings must be returned to the Treasury?

No law or regulation specifies how much of the Federal Reserve earnings must be returned to the Treasury nor when payments must be made.

In practice, the Federal Reserve spends all of its income that it cares to spend, pays dividends to its member banks on their "stock" and sets aside a large amount as "surplus." The remainder is returned to the Treasury at the end of each year.

Despite the fact that there is no limitation on how much the Federal Reserve may spend to meet "expenses," it usually returns to the Treasury an amount many times the amount of its expenses.

In 1963, it returned to the Treasury $879,685,219.

CHAPTER V

WHO DETERMINES THE MONEY SUPPLY?

If the average man were asked to list the 10 most powerful groups of men in the world, the chances are that he would fail to mention one particular group with enormous power right here in this country. If the polling were continued, and the next question was to name the market where most claims to wealth are traded, the answer would again be faulty: it is neither the New York Stock Exchange nor the Chicago Wheat Exchange nor the other obvious markets. In fact, the pollster would probably retire on an old-age pension before he received the correct answer, so few are the people who know.

Further questions, about what the Federal Open Market Committee is, or the so-called open market for Government securities, would still leave the pollster searching in vain. Few know about the Federal Open Market Committee or the open market, and very few people have even heard of it.

If by power we mean power over our economic lives, one of the most powerful groups of men in the world is exactly that unknown group, the Federal Open Market Committee. In many ways their power is equal to that of the President in deciding how the world's greatest economic machine will operate. That is power enough to rank high on any list. Yet this group operates with such little publicity that its existence is virtually unknown except to those few—the major bankers, giant financial houses, and trained economists—whose professional interests have provided them with knowledge about this sweepingly powerful arm of our Government.

There are 19 participants in this powerful body, 7 appointed by the President of the United States and confirmed by the Senate of the United States. Once appointed, however, a man serves for a period of 14 years, and cannot be removed by the President or by any other official body, except for cause. A 14-year term means that only the President succeeding the one who appointed the member can possibly replace him. Because the terms are staggered so that one new member is appointed every 2 years, a President can just barely hope to appoint a majority of the seven if he serves the two full terms allowed by the Constitution. These seven men are the members of the Board of Governors of the Federal Reserve System.

The other 12 men in this select group are elected to their places through the votes of private commercial bankers. Specifically, they are the presidents of the 12 Federal Reserve banks, elected to their posts indirectly by bankers from banks which are members of the Federal Reserve System.

In any one year, there are 12 voting members of the Federal Open Market Committee. The voting members consist of 7 members of the Board of Governors of the Federal Reserve System, plus some 5 of the 12 Federal Reserve bank presidents. The President of the Federal Reserve Bank of New York also is always a member of the

Open Market Committee. Thus there are eight permanent voting members of the Committee. The other four voting members are rotating members. Put otherwise, the other 11 Federal Reserve bank presidents serve on the Open Market Committee in rotation, so that only 4 of the 11 are formally members of the Committee at any one time.

The Open Market Committee's authority over the Nation's economic life and its influence over the Nation's position in world affairs lies in its power to determine this Nation's credit policies. Determining credit policies means determining the Nation's supply of money and credit and, therefore, the general level of interest rates, among other things.

There is no doubt about the influence of the Committee on interest rates. The Committee can and has changed the money supply at will to reach an interest rate objective. But sometimes the Committee will alter the money supply without changing interest rates. Rather what will change is the *availability* of money. Credit conditions, like the weather, have two dimensions. For weather, people want to know both the temperature—hot or cold—and the type of day, rainy or sunny. Similarly with credit, it is important to know not only what the going interest rates are but whether money is freely available at these rates.

Because of this two-dimensional feature, economists would say that interest rates are an example of "sticky" prices. By this they mean, a great deal of pressure for change normally must build up in the credit market before the general level of rates shifts. And this pressure expresses itself first in the changing conditions of *availability* of credit. Thus the *availability* of credit can be changed without changing interest rates. And sometimes this is all the Open Market Committee aims at.

Alternatively, the general level of interest rates can be changed under the right conditions with only a small accompanying change in the *availability* climate. So that it is roughly true to say that the two dimensions of credit, availability and price, can be changed independently of each other.

The notion of "sticky" interest seems to clash with some preconceived ideas about how interest rates are set in our economy. The public clings to the belief that interest rates are a textbook case of the workings of supply and demand in the marketplace. This blind spot about money prices does not exist in connection with prices of other goods.

For example, if you tell the average man that the price which the automobile manufacturers charge for new autos at the factory is determined only by consumer demand for autos and the number of autos the manufacturers have to sell (or have the capacity to produce) that week or month, he would reply without hesitation that you are mistaken. What is more, he would be right. Automobile manufacturers do not run the price of cars up and down in week-to-week or month-to-month response to changes in the supply-demand situation. Quite the contrary; they usually name a price for the year ahead and stick with it throughout the model year. Automobile dealers are more responsive to supply and demand changes.

Much the same behavior occurs in the pricing of money—that is, in the fixing of interest rates. True, interest rates are not nearly so

rigid—so unresponsive to changes in supply and demand—as are the prices of automobiles. But many lending institutions do tend to maintain a given lending rate for long periods of time no matter how much credit they have available to lend, or how much their customers want to borrow.

The commercial banks of the country, for instance, may continue to be "loaned up" for a fairly long period. That is, on the basis of the volume of reserves which the Federal Reserve System permits the banks to have, the banks expand their loans to the maximum, consonant with sound banking practice, and can expand no further. When borrowers seek more loans than the banks can supply, this situation results in a period of tight credit.

Then if the Federal Reserve decides to ease credit, it will increase bank reserves and give the banks added lending capacity to meet the demands of their customers. When this happens, the usual result is that the banks continue charging the same lending rate on new loans as they charged before. It may be weeks, or even months, before rates are lowered to the new level made possible by the eased supply conditions.

This stickiness of interest rates in the United States has led to a situation of price leadership. The custom is for the commercial banks throughout the country to charge a scale of lending rates based on the prime lending rate charged by the big banks in New York City. With rare exception, when the New York banks lead the way the other commercial banks in the country shift their interest rate structure.

The price leaders, then, as far as interest rates are concerned, are the big New York banks whose prime rate forms a base on which the Nation's structure of interest rates rests. Changes in this prime rate signal bankers throughout the Nation to raise or lower their rates accordingly.

But what determines the prime rate? And what forces set off changes in that rate? The answer is that the few large New York banks set the prime rate and change it—combining their feel of the supply and demand for credit with their knowledge and expectations about Treasury and Federal Reserve policy, the combination then liberally laced with a large dose of discretion.

A price which has a relatively large penumbra of discretion surrounding it is a price open to negotiation. And when a large borrower faces the large banks, the price of the agreed-on loan is a negotiated price—negotiated within hailing distance, of course, of the going rate for the particular loan.

The prime example of a negotiated rate is that paid by the Treasury when floating a new loan. At almost all times the Treasury is borrowing huge amounts of money, usually to repay money which the Government has borrowed previously. Government bonds and other securities are always coming due and having to be paid off, and the Secretary of the Treasury issues new securities to replace them. It may appear that the Secretary of the Treasury is issuing these new securities to the general public, but, in fact, he must sell the bulk of any particular issue to a relatively small group of buyers—a few big banks and financial houses. Therefore, he calls on advisory committees of representatives of these banks or financial houses for advice about setting the interest rate on any new security he anticipates issuing.

In other words, although the Secretary of the Treasury nominally sets the interest rate, in practice the rate is arrived at by means of negotiation between a very big seller of credit instruments and a small group of big buyers of these credit instruments. The outcome depends on relative bargaining abilities. If the Secretary of the Treasury is a tough negotiator, the Treasury will pay a lower price for the credit it obtains. If he goes easy with the big banks and financial houses, the Government will pay a higher interest rate.

On their side of the bargaining table, the big financial houses take into account their expectations about the money supply in the weeks and months ahead. If they anticipate tightening of credit, they will hold out for a higher rate than if they anticipate an easing in credit conditions.

Since it is the Federal Open Market Committee which decides whether credit will be tighter or easier, the giant banks and financial houses study the attitudes and policies of the Open Market Committee closely, and they can usually make a pretty accurate prediction as to the future policy of the Open Market Committee.

Thus we find the Government weighing heavily on both sides of the bargaining process. One arm of the Government, the Treasury, figures importantly in the total demand for money because the Treasury is regularly the largest single borrower. On the other side, another arm of the Government, the Federal Open Market Committee, determines the supply of money and greatly influences the price the Treasury must pay.

In this all-important task of determining the size of the Nation's money supply, the role of the Government has undergone fundamental changes over the years. Let us trace the pattern of this change.

Before the National Bank Act the Federal Government largely confined its activities in the monetary sphere to the issuance of coins and currency, the quantity of which was determined at various times by the availability of gold, silver, or both. If the Government had a policy regulating the size of the money supply, it was this link to the money metals. Then, as now, the most important source of the supply of money was the commercial banking system.

Except in the cities, where checking account money was used, note issue was the ordinary way banks created money. The importance of deposit creation was not commonly understood. This was why the limitations which the National Bank Act placed on the money supply were applied to bank notes, not to deposits. (Legal reserve requirements were intended to protect liquidity, not to provide a mechanism for regulating the volume of money created; it was not until the establishment of the Federal Reserve System that the supply of money became a conscious objective of anyone.) The 10-percent Federal tax which made the cost of issuing State bank notes prohibitive caused numerous State banks to go out of business without ever recognizing that deposit creation was an available alternative, in many respects superior to note issue.

After the passage of the National Bank Act, interest rates were generally determined locally, as before, by the supply and demand for credit in the area. Of course, particular banks may have had local monopolies; but in general, a bank's lending rate was usually what competition dictated. Under this system, the bank paid depositors

the rate of interest necessary to keep them banking with it, rather than with some other bank; and, if possible, to persuade depositors in competing banks to transfer their deposits to it. (Banks paid interest on checking accounts until 1935.) On the other hand, the banks charged whatever loan rates competition and the State usury laws permitted, always hoping for a loan rate yielding a margin of profit over and above the rate paid on deposits.

During the period of the National Bank Act and after, Congress attempted, slowly and hesitantly, to be sure, to assume the money powers reserved to it by the Constitution. First it had to put up a fight to establish its constitutional powers, which nominally covered coins and currency, but in fact had to include deposit money to be useful or meaningful. Then, its attempts at money management represented sporadic experiments with bank reserves, and with requirements about the type and amount of loans banks might make, the investment and liability of stockholders, and so on.

When the Federal Reserve System was set up in 1914, it was thought that a way had been found to free the economy from its money supply woes. Under the Federal Reserve System, the money supply was expected to grow with the needs of the economy. How was the System to accomplish this? By putting regulatory powers into the picture? Were officials of a Federal regulatory agency expected to make arbitrary decisions about the quantity of money, then take steps to issue that quantity?

No. It was hoped that by monetizing "eligible" short-term commercial paper; by providing liquidity to sound banks in periods of stress; and by restraining excessive credit expansion, the banking system could be guided automatically toward the provision of an adequate and stable money supply to meet the needs of industry and commerce. A vital stabilizing element in this setup was the provision which the act made for an elastic currency.

The act created a money mill designed to meet day-to-day or seasonal changes in the public's demand for cash without putting needless strains on the reserves of the banking system. In other words, under the Federal Reserve System, both notes and checkbook money are forms of money supported by the System's reserves. Increases in the amount of cash which the public wants to hold can be readily met by setting the System's printing presses in motion; excess currency is immediately absorbed. The System's reserves would expand and contract via the discount window as cash and other needs made necessary. A member bank could increase its reserve account handily by borrowing from the Federal Reserve bank.

To safeguard their liquidity and provide a base for expansion, the member banks of the System could obtain credit from the nearest Federal Reserve bank, usually by rediscounting their "eligible paper" at the bank—i.e., to repeat, selling to the Reserve bank certain loan paper representing loans which the member bank had made to its own customers (the requirements for eligibility being defined by law). If necessary, the member banks might also obtain reserves by getting "advances" from the Federal Reserve bank, which were simply loans made by the Federal Reserve banks to the member banks backed by pledged collateral. Whether through "rediscounting" or "advances," the member banks could obtain reserves if necessary—

based on the individual needs of the community served by the respective banks.

Thus, no specific limits were to be placed on the amount of money the system could create. Under these circumstances, some authority had to have control over discount rates, which would then limit the amount of money manufactured by the banks. Otherwise, the banks might force infinite reserve creation if their lending rate and the System's charges were in a fixed favorable relation. Obviously, the rates at which the Federal Reserve banks lent or discounted paper—the discount rate and the rediscount rate—would have great influence on the lending rates of the banks, and, therefore, limit the demand for money.

The controversy, over whether the private bankers or a public body should control the Federal Reserve System was compromised by giving the bankers a two-third majority on the regional bank boards which select the managements of the 12 Federal Reserve banks. These banks, and their banker-elected managements, were not, however, given the power to set the discount (or rediscount) rate. They could propose a discount rate. But the power to review and determine their proposed rate was lodged in a board in Washington, a public body.

At the time the Federal Reserve Act was passed, the discount rate was considered to be *the* important control element possessed by the System. Open-market operations were fairly insignificant. The individual banks conducted their open-market purchases and sales independently and often at cross-purposes as far as effects on the reserves, money supply, and Government bond prices were concerned. By the twenties, open-market operations ceased being handled so casually. A series of informal arrangements were initiated, evolving by 1930 into a "policy conference" of the 12 bank presidents, through which open-market operations were coordinated and the transactions handled by the New York bank for all the banks in the System. In the emergency banking legislation of 1933, the Open Market Committee (still composed of the Governors of the 12 Federal Reserve banks) was recognized as an official part of the System. In the Banking Act of 1935, it was reorganized to give the seven members of the Board of Governors majority influence, with only five of the bank presidents officially participating at any time.

The System's open-market operations have become increasingly important as an instrument of monetary control; emphasis has shifted from control of the member bank's reserves, during the 1920's and 1930's, to support for Government bond rates, and then back to control of reserves since the so-called accord of 1951. But policy changes have been accompanied by technical advances: the Committee has sharpened open-market operations into a powerful tool. In fact, it has become the fundamental technique of credit policy, far more important than either the discount rate or reserve requirements; in addition, open-market operations are used more or less continuously, in contrast to fairly infrequent changes in either of the other two instruments.

A measure of how important open-market operations have become and how far discounting has lapsed is given by table 2, "Analysis of Combined Earnings of the 12 Federal Reserve Banks, 1914–63 (Selected Years)." The peak earnings from discounts and advances

in any of the postwar years roughly equals the average of such earnings in the later 1920's, when the money supply was far smaller than now.

TABLE 2.—*Analysis of combined earnings, 12 Federal Reserve banks, selected years, 1914–63*

[In thousands]

Years	Total earnings (1)	Earnings from U.S. Government securities (2)	Earnings from discount and advances (3)	Percent of total earnings derived from U.S. Government securities (4)
1914–15	$2,173	$172	$1,218	7.9
1916	5,218	1,107	1,026	21.2
1917	16,128	2,368	6,971	14.7
1918	67,584	3,829	48,348	5.7
1919	102,381	5,761	80,768	5.6
1920	181,297	7,141	149,060	3.9
1921	122,866	6,254	109,599	5.1
1922	50,499	16,682	26,523	33.0
1925	41,801	12,783	17,680	30.6
1928	64,053	10,828	38,334	16.9
1930	36,424	17,273	10,672	47.4
1932	50,019	26,924	17,881	53.8
1933	49,487	37,530	9,137	75.8
1934	48,903	46,131	1,231	94.3
1939	38,501	36,903	61	95.8
1944	104,392	102,810	724	98.5
1949	316,537	312,241	3,472	98.6
1954	438,486	434,837	3,479	99.2
1960	1,103,385	1,084,767	16,634	98.3
1961	941,648	937,615	2,502	99.6
1962	1,048,508	1,039,308	4,132	99.1
1963	1,151,120	1,138,167	8,866	98.9

Monetary economists tend to treat the shift to open-market operations to control the money supply purely as an example of the evolution of control techniques.

But this concentration on technical evolution, accurate as far as it goes, obscures a revolutionary change in the power structure of the System that accompanied the emergence of open-market control. Before exploring this point further, a few facts about the Open Market Committee will be helpful.

Who are the voting members of the Committee?

There are 12 members. They are the 7 members of the Board of Governors plus 5 of the 12 presidents of the Federal Reserve banks. Congress assumed, when it established the Committee, that the public members, with a 7 to 5 majority, would control the Committee. As for voting, the president of the New York Federal Reserve Bank always has a vote, the Cleveland and Chicago presidents vote in alternate years, and the presidents of other Federal Reserve banks are voting members every third year. Since the New York president and the seven Governors always are voting members of the Committee, there are eight permanent voting memberships and four rotating memberships.

When and where does the Committee meet?

The law requires that the Committee meet at least four times a year in Washington. In practice, the Committee meets much more frequently, approximately every 3 weeks.

Precisely what does the Federal Open Market Committee do?

It determines in general the amount of Government securities the Federal Reserve shall buy and sell in the open market, primarily to determine the level of reserves. In essence, the Committee determines U.S. monetary policy. Technically, this authority rests in the Board of Governors, which has sole possession of the other tools of monetary policy—the reserve requirements and the rediscount rate. In actual fact, however, open market operations are relied on predominantly, and the other tools are used to supplement open market operations.

How does the Open Market Committee symbolize the "power revolution" within the Federal Reserve System?

As the abbreviated history of the Federal Reserve Act emphasized, a key struggle during passage of the act was over who would control the System—public or private interests. (By private interests, banking interests are what is meant.) The adversaries in this conflict were quite conscious of what was at stake. The compromise over control placed what was considered at that time to be the master switch governing the money supply and interest rates—the discount rate—in the hands of a totally *public* body—the Board of Governors. This was a deliberate act. President Wilson rejected the notion of diluting the public nature of the Board with his now classic statement, "Which one of you gentlemen would have me select presidents of railroads to be on the Interstate Commerce Commission to fix passenger rates and freight rates?"

The commercial bank interests, it bears repeating, were given control over the board of directors of the individual regional banks. Six of the nine directors of each regional bank board are elected by the member banks of the region. The board of directors, in turn, elects the president and first vice president of each bank for a term of 5 years, subject to the approval of the Board of Governors.

The Federal Reserve Act was designed to have the decentralized System supply reserves only through the 12 independent Federal Reserve banks, by discounts or advances to member banks. At the time the act was passed no other method of extending credit was even contemplated. Because of this, the balance of power over the money supply lay securely, it was thought, with the public side of the System through the authority of the Board of Governors. But when the move toward the alternative open-market technique of control was given legislative blessing by Congress in 1933 and 1935 and a full-fledged central bank thereby created, the balance shifted radically toward the private, commercial banking side of the System.

When Congress authorized the Open Market Committee, and permitted it to engage in the joint purchase and sale of securities for the entire System, the prevailing assumption was that discounts and advances would continue to be the principal means of supplying reserves. It also believed that the legislation left the power arrangement of the Federal Reserve relatively untouched. The public members have a 7-to-5 majority on the Committee. Also, the selected five regional bank presidents swear an oath to protect the public interest when they become official members of the committee. (They take no such oath on becoming presidents of their respective banks.) But Congress was acting in the heart of the depression, and did not take

the necessary care to see that the Committee it actually authorized accurately reflected its intentions.

What happened, in fact, was that the public body—the Board—abdicated control to the Open Market Committee. And the Open Market Committee, with five members who hold their regional bank positions through the votes of privately oriented directors, already represents a diluted public body. Further, to repeat the introduction, all 12 presidents participate in the Committee discussions and debates about the course of monetary policy. They make up part of the 19-member "discussion" Committee. They are free to influence and persuade as they see fit.

The upshot is that the institution and practices of the Open Market Committee have opened the door to the same private banking influences President Wilson was so careful to exclude. Now the private portion of the Federal Reserve System is not only well represented at the regional banks but has five-twelfths of the legal control over the money supply and an even stronger voice in the crucial decision-making process.

None of this should be taken to imply that the regional bank presidents do not consciously seek to reach decisions purely in the public interest. But a man's view of the public interest and of the best methods by which that interest can be furthered, as experience teaches, is inevitably colored by the environment and circumstances of his daily life. That is also why radio and television network presidents are not appointed to the Federal Communications Commission even if their zeal for the public welfare, as they see it, is incontestable. The Open Market Committee, in this sense, is not free from private banker influence and bias. And it is naive for the regional bank presidents to protest, as they forcefully do at congressional hearings, that the public welfare is their only concern when they enter the committee room.

Here, then, is the "power revolution" at the Federal Reserve which destroyed the ingenious compromise of the original legislation. Control of the money supply, with its enormous economic consequences, has passed from a purely public group, composed only of public servants, to a mixed body with dubious qualifications to represent the public interest.

Who should be members of the Committee?

All the members of the Open Market Committee should be public members. There is absolutely no reason why they should not be. They should be selected on the basis of broad experience and judgment and appointed by the President of the United States to represent the general public interest. Indeed, to make the point clearer, the Open Market Committee should be abolished and its powers transferred to a perhaps enlarged Federal Reserve Board.

What function do the regional banks have as discounting becomes a negligible activity?

The truth is that the intended functions of the regional banks, except for check clearing, have dwindled to almost nothing. The discount window is hardly used, so the regional banks no longer provide the "elastic currency" for their regions in that fashion. Open-market operations are the preserve of the New York bank which merely

informs the other regional banks what it has done, in their name, to change total bank reserves.

The major purpose to which the regional banks now devote their energies is to be the eyes and ears—the economic intelligence units—of the Open Market Committee in the country. This was brought out very clearly in the following testimony at hearings of a subcommittee of the U.S. House of Representatives Banking and Currency Committee:

> The CHAIRMAN (Mr. Patman). If you were indicating in the order of importance, and I mean importance, the matter that takes up most of your time, and the time of your officials and employees, what is the most important duty that is performed by the Federal Reserve Bank of Cleveland?
>
> Mr. HICKMAN (president of the Federal Reserve Bank of Cleveland). Well, the processing of information and the formulating of views having to do with economic conditions in the district, in the Nation, and the appropriate posture of monetary policy with respect to these conditions.
>
> The CHAIRMAN. Where do you get that information from?
>
> Mr. HICKMAN. From a variety of sources including businessmen and industrialists in the district. And, of course, we also have an economic staff in our bank.[1]

Instead of a multiheaded central bank, the Federal Reserve has actually developed into a single central bank with 12 branches. And the brain center is the Open Market Committee.

What is the open market account?

The open market account of the Federal Reserve Bank of New York carries out the sales of bonds and bills for the Treasury. The manager of this account in its operations acts as an agent of the Treasury, of the Federal Open Market Committee, and of the central banks of several countries.

How does the Federal Reserve fix interest rates?

1. By its open market operations and by setting the required reserves of member banks, the Federal Reserve determines the total supply of money in the United States. The total money supply in turn determines the amount available for lending.

The amount of desired borrowing—the demand schedule for money—bears a close, though by no means hard and fast, relationship to the level of business activity as measured by, say, the Gross National Product. Broadly, what economists say is that as GNP grows the money supply must also grow if interest rates are not to rise. On the other hand, if our productive resources, population, and capital grow and the money supply is kept constant, a tight credit market will eventually develop with decreased availability and a higher price for money. In consequence, resources will be unemployed and the GNP will not attain its full potential.

2. Open market operations directly affect the level of interest rates on Government bonds. When the Federal Reserve buys, this increases demand for securities, thus raising security prices (lowering interest rates); when it sells, it increases supply, and lowers security prices.

3. The Federal Reserve influences expectations about interest rates. If the Federal Reserve follows a tight money policy, for example, people are led to believe that interest rates will be higher in the future

[1] "The Federal Reserve System After 50 Years," hearings before the Subcommittee on Domestic Finance Committee on Banking and Currency, House of Representatives, 88th Cong., 2d sess., vol. 1, p. 164.

than they now are. And they will act appropriately. Lenders will ask more for their money; borrowers will pay more—since both expect rates to rise shortly anyhow.

What is the "open market"?

The "open market" is a part of the financial markets which make up the money market of the United States located in New York City at the southern end of Manhattan Island. In these markets are traded corporate bonds, Government bonds, corporate stocks, commodity futures, warehouse receipts, and so on. Major borrowers and lenders from over the Nation exchange their funds there. Not the least of the operations on this market is that through which the U.S. Treasury borrows the money it needs by issuing Government bonds and Treasury bills.

How does the market work?

The 1935 amendment to the Federal Reserve Act provided that Government securities "may be bought and sold * * * only in the open market." For the most part this market consists of 21 primary bond dealers (in 1935 there were only 12). Since 1942, the Federal Reserve has had authority to purchase up to $5 billion of Government securities directly from the Treasury, but it has elected not to use this authority.

The actual operations are somewhat as follows: The Treasury determines each week how much money it will need during the following week and notifies the manager of the open market account. All interested parties, including the 21 dealers are notified and bids are made on Monday. On the following Tuesday the Treasury announces to whom the securities are sold. Generally speaking, the sale is to the highest bidders. The 21 primary bond dealers are in constant contact with each other and know long before Tuesday who got the bid.

Do the 21 dealers serve a useful purpose today?

No. Mr. Marriner Eccles, former Chairman of the Board of Governors, described the arrangement as follows:

> * * * The only effect the provision has in practice in this regard is to make it necessary for the Reserve banks to pay commissions to brokers. It also makes it impossible for the Reserve banks to accept short-term certificates of indebtedness from the Treasury in anticipation of tax receipts during quarterly financing and income-tax payment periods * * *. In view of these considerations I would be glad to see the provision taken out of the law (hearings before the Committee on Banking and Currency, 75th Cong., 3d sess., on H.R. 7230, p. 475).

The practical effect of requiring all purchases to be made through the open market is to take money from the taxpayer and give it to these dealers. It forces the Government to pay a toll for borrowing money. It makes it impossible for one agency of the U.S. Government to buy U.S. Government securities from another without paying tribute to these 21 dealers, overwhelmingly located on "Wall Street."

Who were the 21 tollgate dealers in 1962?

There are six "bank" dealers:

First National City Bank of New York.
Chemical Corn Exchange Bank, New York.
Morgan-Guaranty Trust Co., New York.
Bankers Trust of New York.
First National Bank of Chicago.
Continental Illinois Bank of Chicago.

In addition there are 15 "nonbank" dealers:

The Discount Corp.
C. F. Childs & Co.
The First Boston Co.
Aubrey G. Lanston & Co.
Bartow Leeds & Co.
C. J. Devine & Co.
Briggs Schaedle & Co., Inc.
W. E. Pollock & Co.
D. W. Rich.
Salomon Bros. & Hutzler.
New York Hanseatic Corp.
Charles E. Quincey & Co.
Second District Securities Co., Inc.
Blyth & Co., Inc.
Malon S. Andrus, Inc.

The "bank" dealers consist of departments in the bank, while the "nonbank" dealers receive all their income by operating a tollgate on the sale of Government securities.

Is the "open market" open or closed?

The "open market" is in reality a tightly closed market. Before 1952 there were only 12 "authorized" dealers and today there are only 21 dealers. These nine additional dealers were added as a result of congressional pressure on the Federal Reserve to stop dealing only with dealers who could meet such restrictive conditions in order to be "authorized." But admittance into the "dealers' club" is still highly exclusive.

CHAPTER VI

WHO OWNS THE FEDERAL RESERVE BANKS?

In recent years, certain misconceptions and conflicts about who owns the Federal Reserve banks have developed. The reason is that when the Federal Reserve was established, it was felt that the proper way to organize it was on a capital stock basis. But the "stock" which emerged in the Federal Reserve Act was not stock in the ordinary meaning of that term at all. So recent years have been marked by a conflict between private bankers and public officials, each claiming ownership of the banks.

Do bankers believe that they own the Federal Reserve banks?

Yes. The private bankers actually advertise that they own the Federal Reserve banks. The American Bankers Association textbook, Money and Banking puts it baldly on page 234: "The member banks own the 12 Federal Reserve banks." Money and Banking is widely used in courses for bankers sponsored by the American Bankers Association, which are attended by staff members of private banks, and other students of banking—including employees of Federal Reserve banks.

What is the position taken by Federal Reserve officials?

As a rule, Federal Reserve officials do not share this misconception about ownership of the Federal Reserve banks.

In a letter to Representative Wright Patman dated April 18, 1941, Marriner S. Eccles, Chairman of the Board of Governors, stated:

> This so-called stock ownership, however, is more in the nature of an enforced subscription to the capital of the Federal Reserve banks than an ownership in the usual sense. The stock cannot be sold, transferred, or hypothecated, nor can it be voted in accordance with the par value of the shares held. Thus, the smallest member bank has an equal vote with the largest. Member banks have no right to participate in earnings above the statutory dividend, and upon liquidation any funds remaining after retirement of the stock revert to the Government.

In hearings before the Banking and Currency Committee of the House of Representatives, June 17 and 19, 1942, Mr. Eccles stated (pp. 25, 26):

> Mr. ECCLES. Well, the Government, in effect, for all practical purposes, owns the Federal Reserve banks.

The viewpoint of the present Chairman of the Board of Governors, Mr. William McChesney Martin, is indicated by the following quotations from hearings before the Subcommittee on Economic Stabilization of the Joint Economic Committee in 1956:

> The CHAIRMAN. All right.
> No. 2 is that the banks own the Federal Reserve Banking System, and it is run by the banks; it is operated for their benefit.

That is a fallacy, is it not?
Mr. MARTIN. That is a fallacy.

* * * * * * *

The CHAIRMAN. That stock, or that word "stock," is a misnomer, is it not?
Mr. MARTIN. If you are talking about stock in terms of proprietorship, ownership—yes.
The CHAIRMAN. Well, of course, that is what stock is; yes. Normally that is what stock is; when you say "stock," you mean a proprietary interest of some kind, do you not?
Mr. MARTIN. In the ordinary sense, yes.
The CHAIRMAN. That is right, in the ordinary sense.
Mr. MARTIN. You and I are in agreement that it is not proprietary interest.
The CHAIRMAN. Yes.
Therefore, this does not convey any proprietary interest at all, and the word "stock" is a misnomer. It is not a correct word at all. It is just an involuntary assessment that has been made on the banks as long as they are members.

* * * * * * *

The CHAIRMAN. Yes.
Therefore, the statement that the banks own the Federal Reserve System is not a correct statement, is it?
Mr. MARTIN. The banks do not own the Federal Reserve System.

Mr. M. S. Szymczak, member of the Board of Governors, in hearings before the House Small Business Committee on Problems of Small Business Financing, April 1958, is quoted as follows:

The CHAIRMAN (Mr. Patman). Do you agree with Mr. Martin that the member banks do not own the Federal Reserve banks, and have no claim to their assets or income other than the interest payment on the so-called stock which the member banks are required to subscribe to the Federal Reserve banks?
Mr. SZYMCZAK. That is correct.

Testimony of Mr. J. L. Robertson, member of the Board of Governors, before the House Small Business Committee on Problems of Small Business Financing, April 1959, reveals the following:

Mr. ROBERTSON. I think you could operate the Federal Reserve System without the member banks having stock in Federal Reserve banks.

Testimony of Mr. Charles N. Shepardson, member of the Board of Governors at the same hearings reveals the following:

Mr. SHEPARDSON. * * * I think we have never contended that the central bank, the Federal Reserve System, is owned by the commercial banks. On the contrary, we have taken every occasion in my knowledge to disabuse that idea. I don't contend that at all.

The position of the Federal Reserve officials thus seems to be clear: the Federal Reserve banks are *not* owned by the commercial banks.

The viewpoint of the individuals quoted above has also been borne out by the presidents of the Federal Reserve banks in hearings before the House Banking and Currency Committee. However, officials of the Federal Reserve banks are sometimes inclined to take the opposite position. Does this arise from the fact that they are elected by a private bank-dominated board of directors and often are themselves ex-bankers? For example, the Federal Reserve Bank of Chicago justified expenditures not appropriate to public funds on the basis that other private businesses do the same thing—ignoring the fact that the Federal Reserve bank is a public, not a private, institution.

What do academic economists say about this ownership?

Among academic economists there seems to be a difference of opinion. Some economists hold that the banks own the Federal Reserve banks, while others agree with Federal Reserve and other public officials who

maintain that the Federal Reserve banks are public organizations, not owned by the banks. Here are some quotations from college textbooks which show the general variety of opinion among college professors:

* * * In reality, no stock of the Federal Reserve banks has been sold to either the public or the Government, and even the member banks have paid in only half of their subscriptions. *Thus, the Federal Reserve banks are owned wholly by their member banks*, each member bank having paid in to its Federal Reserve bank an amount equal to 3 percent of its own paid-up capital and surplus (source: "The Economics of Money and Banking," revised edition, by Lester V. Chandler, 1953, pp. 282, 283). [Emphasis added.]

Although the Federal Reserve banks are public institutions, their stock is held by the member banks (source: "Banking Systems," edited by Benjamin H. Beckhart, 1954, p. 893).

The position of the Federal Reserve banks is even harder to state precisely. They were described generally as an "instrumentality" of the Government. In a joint statement by the presidents of the 12 Federal Reserve banks they were said to be "part of the private economy and * * * part of the functioning of the Government (although not technically a part of the Government)." It was further stated that they were intended to be "allied to the Government but not * * * a part of the Government itself." Allan Sproul, president of the New York Federal Reserve Bank, summed up by saying that the banks "should function somewhere between private enterprise and the Government" (source: "Principles and Practices of Money and Banking," by Charles R. Whittlesey, 1954, pp. 244, 245).

President Woodrow Wilson asked the 63d Congress for an elastic note issue and a decentralization of banking. He said, "Control * * * must be public, not private, must be vested in the Government itself, so that the banks may be the instruments, not the masters, of business and of individual enterprise and initiative" (source: "Money and Banking," by the Committee on Money and Banking, Pitman Publishing Co., 1957).

* * * The member banks purchase stock in and therefore own the Federal Reserve banks of their own district (source: "Our Modern Banking and Monetary System," by Rollin G. Thomas, 1957, p. 245).

These quotes illustrate the disagreement and confusion which exists on the matter of Federal Reserve ownership.

What is the cause of this misunderstanding and disagreement?

The root of the trouble is the "stock" in the Federal Reserve banks which the member banks hold. The original act required that the banks invest 6 percent of their capital stock in the Federal Reserve banks.

Why was the Federal Reserve Act written to require member banks to invest in the so-called stock of the Federal Reserve banks?

The framers of the Federal Reserve Act gave many reasons, but the main reason was this: it was expected that the Federal Reserve would issue money, not mainly against Government securities as is now the practice, but against commercial and industrial loan paper—"eligible paper" as the reader knows.

This meant that the member banks would be exchanging obligations of individual commercial firms, farmers, and so on, for obligations of the U.S. Government—Federal Reserve notes. This exchange, of what might be rather risky obligations for the riskless obligations of the Government, was the reason for the "stock ownership" requirement. This is why: the 12 separate Federal Reserve banks were to issue the Federal Reserve notes, with each bank passing on the quality of the loans which it would accept from the member banks in exchange

for notes. Furthermore, the administration of these banks was to be under the control of the member banks themselves, as is the case today. This meant that there was a possibility that the member banks could pass on doubtful loans made to their customers to the regional Federal Reserve bank, receiving cash in exchange. And if the Federal Reserve banks were overstocked with private promissory notes, the system's stability was threatened. So the Government would lose by exchanging Federal Reserve notes for risky notes of the banks' customers, and in addition could lose whatever of its general funds it had on deposit with the Federal Reserve banks. (It was expected that these banks would be the principal depositories of Treasury funds.)

It was in view of these considerations that Congress, in framing the Federal Reserve Act in 1913, required member banks of the Federal Reserve System to put a certain percentage of their capital into the "stock" of the Federal Reserve banks; this "stock" was a safeguard against a misuse of the Government's credit which was being delegated to these banks. The 1913 act placed on the member banks, furthermore, a "double liability" for their "stock" in the Federal Reserve banks. In other words, if a Federal Reserve bank failed, the member banks would lose not only their invested capital, but an equal amount of capital which they would also forfeit.

Thus, the report of the Senate Committee on Banking and Currency explaining the Federal Reserve bill had this to say:

> The reasons for requiring the banks to subscribe to this stock with a double liability are—
>
> First. To protect the large deposits of general funds which the United States will probably place with such banks.
>
> Second. To protect the United States against the extension of credit through the Federal Reserve notes, the obligations of the United States, loaned to the Federal Reserve banks against commercial bills.

Today, the need for this safeguard has disappeared. When the Federal Reserve System began operations, it did in fact issue money against commercial loan paper, and this was its principal way of creating money from 1914 to 1921. But since then eligible paper has played so small a part in Federal Reserve credit as to be practically nonexistent: in November 1963, the collateral which the Federal Reserve banks held against outstanding Federal Reserve notes was $34,670 million. Less than one-half of 1 percent of this collateral is "eligible paper," the other 99½ percent being U.S. Government securities and gold certificates.

An additional reason for requring the member banks to invest some of their capital in the Federal Reserve banks was given by the members of the Senate Committee on Banking and Currency who recommended the arrangement:

> To justify the Government in putting on the banks the prime responsibility of administering these banks and safeguarding their own reserves and their own capital stock, and making them responsible to the country for safeguarding the welfare of the national banking system, protecting the national gold supply under the safeguard of governmental supervision.

But an equal number of members of the Senate Committee on Banking and Currency felt that stock in the Federal Reserve banks should be sold to the general public, not to the banks—as a means of drawing more capital into the banking system of the country. This way, they

felt, "tens of thousands of our people will be directly interested in this great Government-controlled banking system." This group also felt, as they stated in the committee's report:

> It has seemed to us, moreover, wise that upon these Reserve banks the Government should have a majority of the Board of Directors.

At that time, the amount of capital in the banking system of the United States was generally considered to be small, and both schools of thought in Congress recognized the lack of public confidence in the banking system, which encouraged people to hold money in cash, rather than in banks. The Senate committee report said that an important result of setting up the improved system of banking would be—

> * * * an increased public confidence in the banks and which would attract a considerable amount of money which is not now deposited in banks at all and would thus enlarge the deposits of the bank and enlarge substantially their money-creating power.

Finally, both groups in the Senate committee recognized that the 6 percent interest rate to be paid on the Federal Reserve bank stock was extremely attractive and would provide a subsidy to entice private banks to join the System. Those recommending banker control of the Federal Reserve banks said that this so-called stock would prove irresistible to banks:

> * * * earning 6 percent net, free from tax, making the earning on such stock between 7 and 8 percent, which is a higher return than any bank can possibly average upon its deposits.

But, the group favoring public ownership of the stock pointed out that the stock could be sold to the public at a rate of 5 percent, and if offered to small investors, tax free, it would be a—

> * * * highly desirable 5 percent investment which they will eagerly take.

What is the nature of this "stock"?

Hearings before various congressional committees have established clearly that this stock is not stock in the ordinary meaning of the term.

(1) It carries no proprietary interest. In this respect, the stock is unlike the stock of any private corporation.

(2) It cannot be sold or pledged for loans. It thus does not represent an ownership claim.

(3) In the event of the dissolution of the Federal Reserve banks, the net assets after payment of the liabilities and repayment of the stock go to the U.S. Treasury rather than the private banks.

(4) The stock does not carry the ordinary voting rights of stock. The method of electing officers of the Federal Reserve banks is in no way connected to the amount of stock ownership. Instead, each bank in a district has one vote within its class, regardless of its stock-ownership.

What are the problems created by this stockownership?

(1) The major problem is that it leads to misconceptions about the ownership and nature of the Federal Reserve banks. Private bankers are, as was indicated above, led to believe that they own the Federal Reserve and thus have the right to control it and to share in its profits.

(2) Some Federal Reserve officials have been led to believe that the

funds of their banks are not public funds but funds that the officials may spend as they see fit. This argument has been used to justify spending funds of Federal Reserve banks in a manner not suited to public funds: for scholarships to employees, for Christmas gratuities to various people who are not employees of the banks, for boating trips and for other extravagances of officers of the banks.

(3) The stock is an additional cost to the taxpayers, and a subsidy to private banks. Dividends on the stock run to almost $24 million a year; except for the tax paid on them, such dividends represent a net loss to the taxpayers. If the stock did not exist the money which goes as interest would go to the taxpayers.

How can these problems be eliminated?

The logical way to eliminate these problems is to eliminate their cause: the stock. At present there is a bill before the Congress which would have the banks return this stock to the Federal Reserve banks and have the Reserve banks pay it off.

Could the Federal Reserve operate without this stock?

Yes. Although the stock was necessary in 1914, today it serves no worthwhile purpose. The statement of Board Member Robertson, quoted above, indicates that the Federal Reserve could operate just as well without the stock. This point has been well established in hearings.

Would elimination of the stockownership change the basic structure of the Federal Reserve?

The same method of electing the boards of the Federal Reserve banks, the same requirements for membership in the Federal Reserve System, and the same organizational structure of the Federal Reserve banks could be maintained. The same check clearing and other relationships between private member banks and the Federal Reserve could exist. There is no reason to believe that the basic structure of the Federal Reserve System would be changed simply because the stock were retired, though there are many reasons for altering the System's structure.

Is there any reasonable justification for this stock?

No. The stock has been justified on the grounds that it is traditional. Members of Congress have indicated, and rightfully, that it is their duty to change those traditions which are harmful to the Nation. It has been justified as being a symbol, though it is not clear just what the stock is symbolic of. Nor has it been established that this symbol could not be maintained in another less expensive form, such as a membership certificate. Other psychological factors are supposed to be maintained by this stockownership. These factors are largely in the realm of mysticism.

No sound reason has been given for keeping this stock.—The banks, of course, oppose elimination of the stock because it represents a generous gift from the taxpayers which they do not wish to give up.

Does the Federal Reserve need the money?

No. The Federal Reserve is a money-creating system. It can write a check whenever it needs money. Thus the Government is paying interest to the bankers on funds which it does not need.

CHAPTER VII

WHY WAS THE FEDERAL DEPOSIT INSURANCE ACT PASSED?

For 18 years after the Federal Reserve Act was passed, no basic changes were made in our banking laws. This was not because the banking system had no problems. On the contrary, the problems it had were ignored until the holocaust of the great depression faced the Nation with the brutal cost of years of neglect. The seemingly trouble-free system described a few chapters ago simply broke down in 1932–33. Widespread runs on the banks during this period became commonplace. When President Roosevelt took office in 1933, one of his first acts was to declare a bank holiday, closing the banks in an attempt to halt the runs and shore up, if at all possible, the collapsing structure.

The fatal flaw in the system developed in the late 1920's. During this period the banking system unwittingly transformed itself into a huge credit plant directly supplying the essential ingredient sustaining a crazily inflating stock market. The banks created money by making loans to brokers. And the brokers loans were so important that they became a prime source of the money supply.

These brokers' loans were based on collateral in the form of the stocks acquired by the loans. But since millions of people were wildly speculating in stocks and raising their prices skyward, the value of the collateral was highly volatile and unsound. Nevertheless, brokers loans grew from $2 billion to over $8 billion during the boom. As someone put it, the market discounted not only the future, but the hereafter. When the inevitable crash came, and many sensible people, including some Federal Reserve officials, had foreseen it, brokers' loans were called; $4 billion in only 4 months, and within the next 3 years an additional $4 billion had been called. Largely because of this, the Nation's total money supply decreased by about $8 billion, or one-third, between 1929 and 1933. Such a reduction in the money supply could not help but magnify if not initiate any crash in prices and output—and it did.

The unprecedented reductions in output and prices, in turn, weakened the banks to the point of bankruptcy. Many banks, sound before the crash, were in bankruptcy in the following years. The number of commercial banks in the United States declined drastically, falling from 26,401 in 1928 to 14,771 in 1933.

The bank holiday was seized on by President Roosevelt as an opportunity for action. The Emergency Banking Act of 1933, pushed through the entire legislative process in a single day, marked the start of efforts to solve the problems of the banking system. It provided that all banks would be checked; sound banks would reopen, unsound banks would remain closed. This in itself restored a degree of confidence in the banking system, and the runs on banks were large-

ly stopped. But, it was felt, major steps to correct the situation were still required. The result was the establishment of the Federal Deposit Insurance Corporation.

But many changes of importance, other than creation of the Federal Deposit Insurance Corporation, were made in 1933, 1934, and 1935. Some, like the Emergency Banking Act mentioned above, were of a temporary, stopgap nature, but others were permanent, with lasting effects on the banking system of the country.

What changes were made by the Banking Act of 1933?

Most important was the establishment of a temporary deposit insurance plan which went into effect on January 1, 1934. This plan was made permanent and took its present form in the Banking Act of 1935. Other major changes were made by the 1933 act:

(1) To prevent cutthroat competition for demand deposits, the act provided that commercial banks should no longer pay interest on their demand deposits. This was desirable from the standpoint of the banks because it reduced their costs. Although it was designed merely as a temporary measure, this provision still remains in the lawbooks.

(2) The Federal Reserve Board was given power to change the reserve requirements required of member banks, subject to approval by the President. This, too, was changed by the 1935 act, which provided that the Board of Governors alone, by majority vote, could change reserve requirements, within limits set by the law.

(3) The 1933 act also prohibited commercial banks from making stock market loans, and investment banks from accepting public deposits. This was an effort to prevent a wave of stock market speculation like that of the twenties by keeping commercial banking and investment banking separate and distinct.

What did the Securities and Exchange Act of 1934 do?

This act put various restrictions on stocks offered for sale, and established the Securities and Exchange Commission to police them. From the standpoint of monetary controls, however, perhaps the act's most important aspect was the provision giving the Federal Reserve Board power to set the cash downpayment required on stock market purchases.

What changes were made by the Banking Act of 1935?

Some have been already discussed: the Federal Deposit Insurance Corporation was made permanent, and the Board of Governors was given power to change reserve requirements. The act of 1935 had other important provisions:

(1) The Board of Governors of the Federal Reserve System was changed. Membership no longer included the Secretary of the Treasury and the Comptroller of the Currency, and the number of members was cut from nine to seven. The name, the Federal Reserve Board, was changed to the Board of Governors of the Federal Reserve System. The reorganized Board, with its increased powers really gave us a central bank for the first time, in place of a system of individual Federal Reserve banks which were largely on their own.

(2) Also of primary importance in creating a true central bank was the establishment of the Federal Open Market Committee to determine purchases and sales of Government securities for the entire System.

(3) Another change made by the 1935 act related to loans of the Federal Reserve banks. This act allowed the Federal Reserve banks to extend reserve bank credit on any type of credit which the commercial bank possessed.

(4) The 1935 act also contained provisions concerning regulation of bank holding companies.

What is the Federal Deposit Insurance Corporation?

The Federal Deposit Insurance Corporation—the FDIC—is a Government corporation set up to provide depositors of funds in commercial banks insurance against loss of such deposits in the event of failure of the bank, to the extent of $10,000 for each depositor. Deposit insurance was set up on a temporary basis by the Banking Act of 1933 and was made permanent by the Banking Act of 1935. Such insurance, it was hoped, would prevent the recurrence of serious runs on banks.

What is an insured bank?

A bank is insured when it complies with the rules and regulations laid down by FDIC and becomes a member of FDIC. In selecting members, the law requires FDIC to consider the adequacy of the bank's capital structure, its earnings prospects, and the general character of its management. At the end of 1962, 13,455 banks were members while only a few hundred small banks had not joined the FDIC.

What is an insured deposit?

When a bank becomes a member of the FDIC each individual deposit in that bank is insured up to $10,000. This insurance is much like your life insurance policy, or the fire insurance that guarantees to pay you if certain events occur. Here the "event" is a bank failure. On December 31, 1962, $179 billion of deposits were insured.

What happens if an insured bank fails?

The depositors receive the full amount of their deposits, up to the maximum of $10,000, usually within 10 days to 2 weeks. If the FDIC desires, it may set up a new bank in the community. Then depositors in the bank which has gone broke are given the option of taking their money as deposits in this new bank.

How many insured banks have failed since 1933?

Since 1933, 445 insured banks have failed, as of December 31, 1962. Total deposits of these banks were about $600 million. Slightly more than 5,000 depositors with accounts over $10,000 lost any money, and these losses were small.

Where does FDIC get its money?

The FDIC has two main sources of money: assessments on insured banks and interest on U.S. Government securities it holds. Each accounts for roughly half of the corporation's income.

How did the FDIC get the money to start business?

The Treasury purchased $150 million of stock and the Federal Reserve, on the instructions of Congress bought $139 million of stock. This stock was repaid by the FDIC in 1947 and 1948—but only at 2 percent simple interest. It should have paid compound interest.

How much do the insured banks pay the FDIC?

Insured banks are required to pay FDIC a gross assessment of one-twelfth of 1 percent of their total deposits. This assessment is similar to the premium paid on a life insurance or fire insurance policy.

Has the rate of assessment been the same since 1933?

The gross rate has remained the same, but since 1950 the FDIC has been allowed to give back more than half of the total assessment. The FDIC has actually returned approximately $1.2 billion—over 57 percent of the gross assessments—to the banks since 1950. The law giving the money back to the banks was steered through the 80th "do nothing" Congress by Congressman Jesse P. Wolcott. The Eisenhower administration rewarded him by making him Chairman of the Board of Directors of the FDIC.

Is the FDIC subsidized by the Federal Government?

Yes. Although it paid back the original $289 million of stock, several subsidies still remain. The fact that the FDIC gets almost half of its total income from Government securities represents a sizable subsidy and means that the taxpayers are footing almost half the bill for this insurance.

What direct commitment does the Treasury have to the FDIC?

The 1947 amendments to the FDIC Act provide that the FDIC can borrow up to $3 billion from the U.S. Treasury, at its discretion. The law directs the Secretary of the Treasury to put up this $3 billion any time the FDIC requests it.

Does the FDIC pay for this commitment?

No. But if normal banking practices were followed, the FDIC would be required to pay the Treasury 1 percent a year. If the FDIC were standing on its own feet, it would have to pay $30 million a year for this commitment—a total of $510 million for the past 17 years. This subsidy is over $200 million greater than the original capital stock subsidy.

Does the Treasury have any other commitments to the FDIC?

Yes. It is generally agreed that if there were a wave of bank failures, the Treasury would be morally bound to stand behind the FDIC although there is no legal obligation.

Should an organization operating on Government funds be allowed to build an $8.5 million office building without permission of Congress?

No. But this is precisely what the FDIC has recently done. It should be allowed to do so no more than should the local postmaster.

Does the FDIC maintain a sufficient reserve fund?

Proper management of any insurance company requires that a sizable reserve fund be maintained to provide payment in times of need. No one knows exactly how much the FDIC should keep, but it probably should keep more than the present $2.5 billion.

How much reserve does the FDIC maintain per $100 of deposits?

If we compute the reserves for each $100 of *insured deposits*, the FDIC now has $1.40 for every $100 of insured deposits compared with

$1.84 for each $100 of insured deposits in 1934. Because the FDIC has given back over half of its assessments during the past decade, its reserve per $100 of insured deposits is now less than in 1934.

How much reserve do life insurance companies maintain?

Whereas the FDIC keeps only $1.40 in reserve for each $100 of potential liabilities, private life insurance companies keep over $20 for each $100 of potential liabilities. Private life insurance companies find it desirable to keep a reserve ratio which is more than 13 times the reserve ratio kept by the FDIC. No one knows just how much the FDIC should keep, but these comparative figures indicate that it probably does not now keep enough.

Does FDIC regulate and control insured banks?

Yes. Under the provision of the act which allows the FDIC to see to it that banks do not engage in "unsafe and unsound practices in conducting business" and which allows it to lay down basic requirements for membership, the FDIC has come to regulate the banks rather completely, because banks need deposit insurance to hold deposits and remain in business.

If banks are to perform their duty of financing business, they must take risks; the amount of risks which banks may take is greatly reduced by FDIC regulations.

Does this mean that the FDIC is running the banks?

To a large extent it is. By regulation and examination, the FDIC can prevent banks from investing in any investment the examiners deem undesirable. And FDIC conservatism is making it more and more difficult for small businessmen and farmers to get the financial assistance they need.

Do the bank examiners consider public welfare in deciding whether or not loans are satisfactory?

No. This point is made clearly by Prof. Raymond P. Kent in his textbook on "Money and Banking":

> The regulatory authorities and examiners, so to say, are not especially interested in the justification given loans from the standpoint of public welfare and economic stability, but rather in the probabilities of their being repaid at maturity so that depositors may not be endangered by losses. The loan to Bill Smith may be adjudged "good" because he has put up adequate collateral and even though he is using the money to put out a useless patent medicine, while that granted to Jack Brown may be condemned as "unsound" because he is not a very good risk and even though he is using the money to pay his son's tuition in college.

How else does FDIC control banks?

In addition to regulating insured banks through bank examinations, the FDIC controls the banking industry by refusing to let it expand. This it does by refusing to insure banks. A national bank must be insured to come into existence as must a State bank which is a member of the Federal Reserve System. For success in banking, membership in the FDIC and the Federal Reserve are highly desirable. By controlling membership, the FDIC controls the number of banks in existence.

CHAPTER VIII

HOW THE FEDERAL RESERVE GIVES AWAY PUBLIC FUNDS TO THE PRIVATE BANKS

Private banks enjoy a very special relationship with the Federal Government. After all, most business firms employ private capital or privately owned resources to produce a product or provide a service which can be profitably sold in the marketplace. Most business firms pay for the raw materials and services they receive, and, furthermore, in the case of most kinds of business firms, the business itself is a risk-taking venture. The firm succeeds or fails in competition with other business firms.

But the conditions under which private banks operate are very different. In the first place, one of the major functions of the private commercial banks is to create money. A large portion of bank profits come from the fact that the banks do create money. And, as we have pointed out, banks create money without cost to themselves, in the process of lending or investing in securities such as Government bonds. Bank profits come from interest on the money lent and invested, while the cost of creating money is negligible. (Banks do incur costs, of course, from bookkeeping to loan officers' salaries.) The power to create money has been delegated, or loaned, by Congress to the private banks for their free use. There is no charge.

On the contrary, this is but one of the many ways the Government subsidizes the private banking system and protects it from competition. The Government, through the Federal Reserve System, provides a huge subsidy through the free services the System provides for member banks. "Check clearing" is one of the services; i.e., the collection and payment of funds due one bank from another because of depositors' use of their checkbook money. The costs of this service alone runs into scores of millions of dollars.

The gross expenses of the combined Federal Reserve banks totaled $207 million in 1963, most of which was incurred as a cost of providing free services to the private banks. Other Federal agencies also receive services from the Federal Reserve. But these are not free. The System received about $20 million for "fiscal agency and other expenses" in 1963.

In addition, the Federal Government provides private banks with a large measure of protection from competition, and the hazards of failure.

For example, when a group of business people wish to enter the banking business by opening a *national bank*, the Federal officer in charge of such matters will not issue a charter, or license, before his office has made studies and surveys to determine whether the proposed bank meets certain "standards." One "standard" is that the Comptroller of the Currency must be satisfied that (*a*) the new bank will succeed, and that (*b*) it is not likely to cause any already existing

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bank to fail, or even to "weaken" substantially any already existing bank. This means, in brief, that nobody can enter the banking business by opening a national bank, unless the proposed bank is to be located where it will not cause an inconvenient amount of competition to other banks already in business.

If a group wishing to enter the banking business is refused a national bank charter, the group may, of course, apply to State banking authorities for a charter to be a State bank. But State banking boards are pretty much like the Comptroller of the Currency: they tend to make sure that a new bank will not encounter strong enough competition to weaken itself or weaken the banks already in business.

As a practical matter, it is almost impossible to enter the banking business and attract depositors unless the bank can obtain deposit insurance from the Federal Deposit Insurance Corporation. Not many depositors are willing to keep funds in banks without FDIC insurance. The Federal Deposit Insurance Corporation is, of course, another Federal agency. So, in practice, even where a State banking authority is willing to issue a charter for a new State bank, a Federal agency has the last word regulating "undue" competition.

People who go into the grocery business, or the farming business, or almost any other kind of business, enjoy no such protection from competitors coming in and taking over a share of their market, or even squeezing them out of business.

Federal law provides the banking business with still another kind of protection from competition. This is the Federal law which makes it unlawful for most banks to pay their depositors any interest on demand deposits. Before this law was passed, commercial banks used interest payments to compete for demand deposits—especially those of large accounts, and these depositors tended to move their checking accounts to the bank paying the highest interest rate.

Aside from subsidies and protection against competition, the Government nourishes the banks in a third way, through FDIC insurance. Because of this insurance, many depositors are willing to leave funds in the bank, which they would otherwise hoard in lockboxes or in other places outside the banks. The existence of this insurance means, then, that a larger portion of the money supply at any given time is in the form of bank deposits and a smaller portion is in the form of currency and coin than would otherwise be the case. Money in the form of currency and coin makes no profit for the bank, but money in the form of deposits does.

And then, of course, there are the indirect subsidy features of the FDIC program explained in the last chapter: insufficient premiums, free recourse to the Treasury for $3 billion and the general protective umbrella provided by the Government's ultimate backing.

Why all this direct Federal aid to the private commercial banks? Does this result from a self-assumed obligation to assure profits for the bank? Not at all. The primary purpose of the aid is to assure the general public good banking services and a good money system, both of which are recognized as indispensable to trade and commerce in a modern economic system. True, bank profits for the bankers are necessary for a good banking system. But bank profits are only a means toward furthering the general public interest.

Now the real question arises. The supply of money in existence at any particular time is created in part by the Government, and in part by the private banks. The Federal Reserve decides—within broad limits fixed by law—what portion of a given money supply it will itself create, and what portion it will allow the private banks to create. How the portions are divided is important—it means billions of dollars. For whatever money the private banks create, they obtain interest-bearing assets. They make their profits from this interest. The same is true of the Federal Reserve System. The larger the portion of the money supply it creates, the more interest-bearing assets it acquires (in the form of Government securities) and the more interest it collects. Ultimately, this interest, over and above the Federal Reserve's expenses, is returned to the Federal Treasury and is used to pay expenses which the taxpayer would otherwise have to pay.

The Federal Reserve, then, is faced with any number of choices about about how to proceed in changing the money supply. Indeed, even without changing the money supply, the Federal Reserve is always capable of altering the percentage of the existing money supply supplied by itself and the private banking system respectively, as the example in chapter III illustrated. In other words, the Open Market Committee and the Board of Governors are continually making decisions about how they wish the earnings associated with the manufacture of money to be divided between the Treasury and the private banks. This involves billions of dollars over any reasonable period of time. (The System's income from interest on Government bonds was $1.1 billion in 1963 alone.) And in recent years the System has, regrettably, been following a policy which has given away billions to the private banks.

Is there an example of the Federal Reserve's allowing the private banks to create all the money needed to increase the money supply?

Yes, there are many examples. Here is one. In the early part of 1958 the Federal Reserve decided to allow the private banks to increase the money supply by approximately $10 billion. It did this by lowering reserve requirements. The stated purpose at the time was to make it possible for the banks to make more loans to business, because in that period, business was suffering from a severe recession. In fact, however, the private banks used all of this new money-creating power to acquire an additional $10 billion of Government securities. Their loans to business and consumers actually went down between the end of 1957 and the end of 1958, when their holdings of Government securities went up by $10 billion.

Why was the $10 billion giveaway in 1958 bad?

Because the Federal Reserve could have itself created the $10 billion of money by purchasing Government securities. (And by raising reserve requirements by the appropriate percentages, there would have been no further private bank-created increase in the money supply.) Since this was the only purpose for which the money-creating powers were used, the general public would have been better off if the Federal Reserve had created the money and acquired this amount of Government securities. Since the interest on Government securities which the Federal Reserve already owns is more than enough

to pay its operating expenses, all of the interest payments on the extra $10 billion of Government securities would have gone back into the Treasury instead of into bank profits.

Did the banks need the increased profits which they obtained from the 1958 giveaway?

No. Although almost all other kinds of business were suffering from the recession and several million families were suffering from unemployment, bank profits had gone up—not down. Under the high interest policy of the decade of the fifties, bank profits jumped higher and higher each year.

Furthermore, most of the $10 billion giveaway went to only a few very big banks, who were already enjoying extremely high profits. Almost one-fourth of the $10 billion went to 18 big banks in New York City. Only 2 percent of all the banks in the country received about three-fourths of the whole $10 billion.

Another example: The bond giveaway bill

The bond giveaway bill was introduced in Congress in 1959 to carry out a plan recommended by the American Bankers Association. The intention was to transfer $16.8 billion of Government securities from the vaults of the Federal Reserve banks into the hands of private bankers. The bill was generally referred to by the bankers as the "vault cash bill." While the bill did have something to do with vault cash, this was a very minor feature, and the term "vault cash bill" was thus very misleading.

What happened to the bond giveaway bill?

Urged by the Federal Reserve as well as the ABA, Congress passed the bill, giving the Federal Reserve the authority to do practically everything the bankers asked, including the $16.8 billion giveaway. But in passing the bill, several Members of Congress in charge of the legislation made statements for the record indicating that it was not the intent of Congress that the Federal Reserve use this authority to give away any large amount of Government bonds.

How was the bond giveaway to be carried out?

According to the plan recommended in a report made by the Economic Policy Commission of the American Bankers Association to the Federal Reserve System, the Federal Reserve was to lower reserve requirements of the member banks, and, simultaneously, "sell" vast quantities of the Government securities which it then owned. The proposed process was to be carried out "gradually" over a period of time, to be completed by mid-1962. By then, according to the plan, the Federal Reserve would have owned $16.8 billion less in Government securities, and the private banks would own $16.8 billion more, than would have been the case if reserve requirements were left at their already-existing levels. In other words, reserve requirements in effect at the time this plan was advanced meant that as the Federal Reserve expanded the money supply, it would, itself, create $1 of new money for each $5 of new money created by the private banks. The American Bankers Association plan was one which would allow the private banks to create about $12 of new money for each $1 created by the Federal Reserve.

The $16.8 billion of Government securities which were to be given to the private banks consisted of two parts: one, $9.8 billion of Government securities which the Federal Reserve had already acquired and owned as of mid-1956; second, $7 billion of Government securities which the Federal Reserve would be expected to acquire, by mid-1962, to permit normal increases in the money supply, at the old 1-to-5 division of the money-creating powers then prevailing.

How did the bankers explain the intended effects of their proposal?

Speaking of the $9.8 billion of Government securities which the Federal Reserve already owned, the report of the ABA Economic Policy Commission said:

If the Commission's proposals were in effect at the present time * * * required reserve balances that member banks must maintain at the Federal Reserve banks would be $9.8 billion lower (53 percent lower) than their actual current level. (ABA's report, p. 26.)[1]

Of course, if the required reserve balances maintained by member banks at the Federal Reserve for a given total of deposits outstanding are to be lowered by $9.8 billion, the Federal Reserve would have to sell $9.8 billion of Government securities to extinguish the now excess reserves. Otherwise the $9.8 billion in unneeded reserves credited to the banks would be used to increase the money supply. And, when the Federal Reserve sold these securities, the bulk would go into the hands of the private banks.

Speaking of the additional $7 billion of bonds which the Federal Reserve could be expected to acquire by mid-1962, if the bankers' plan were not put into effect, the ABA report said:

Looking ahead, it is clear that the needs of the public for currency and bank deposits will increase with the growth of the American economy. To meet these needs, it will be necessary to expand the reserve base of the banking system either by creating more reserves through open-market operations or by reducing reserve requirements.

* * * * * * *

To be more specific, if past relationships between production, currency, and deposits are approximated in the future, then over the next 5 years demand deposits will increase by something like $20 billion, time deposits by about $12 billion, and currency in circulation by more than $3 billion. If such an expansion were to be met without reducing reserve requirements, it would be necessary to supply the banks with about $7 billion of additional reserve balances by means of open-market purchases of Government securities by the Reserve banks.

It would be far better to provide for this growth by lowering the reserve requirements of member banks over the coming years. (ABA's report, pp. 12 and 14.)[2]

Why did the bankers want to take $16.8 billion of Government securities out of the vaults of the Federal Reserve?

The report of the American Bankers Association has this to say:

There seems to be considerable agreement that the Federal Reserve banks should work toward a reduction of their enormous holdings of Government obligations. At the present time the Reserve banks hold about $24 billion of Governments, an amount far in excess of their needs either for earnings or for credit control.[3]

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[1] Congressional Record, July 1, 1959, p. 12507.
[2] Congressional Record, July 1, 1959, p. 12507.
[3] Congressional Record, July 1, 1959, p. 12514.

But who was in "considerable agreement"? And why was it "far better" to lower reserve requirements? And by what measure are the Reserve's holding of Government bonds "enormous"?

The bankers were undoubtedly in considerable agreement with each other about all these matters. Why not? They were proposing to fleece the other taxpayers out of $16.8 billion of their property.

What did the bankers say about the effect of their plan on the taxpayers?

The ABA report had this to say:

It is true that the Government would lose a small amount of revenue, since about 90 percent of the Reserve banks' annual earnings after dividends are now being voluntarily paid over to the Treasury. However, the Reserve banks were never intended to be a source of revenue to the Government, and policy regarding the level of required reserves should certainly not be determined on the basis of the effect on Federal Reserve payments to the Treasury.[4]

In other words, the bankers considered that several hundred million dollars per year in interest payments on this enormous Government debt is only a "small amount of revenue" for the Government (though obviously an enormous increase in profits for the banks).

What did the Federal Reserve authorities do to protect the public property against the proposed raid by the bankers?

One might think that public officials charged with the protection of public property in their custody would have locked their vaults and hollered for help when they received this report from the bankers, proposing a gigantic raid on the Federal Reserve's vaults. Instead, however, the Board of Governors of the Federal Reserve System endorsed the bankers' plan with slight modifications, and urged Congress to pass a bill necessary to carry out the plan. The top officials of other Federal banking agencies, including the Comptroller of the Currency, also endorsed the plan and urged Congress to approve it.

Were the Federal Reserve officials aware of what the bankers' plan would do?

Yes. The staff of the Federal Reserve Board made a report on the bill which the Federal Reserve urged Congress to pass, and the Board of Governors submitted this report to the Committees on Banking and Currency of the Senate and the House. This report declared that the bill would—

improve the earning position of banks and aid them in building up their capital positions. * * * (Member Bank Reserve Requirements, hearings, Apr. 7, 8, 9, 1959, p. 28.)

This report explained further that:

To the extent necessary to avoid undue credit expansion, reserves released by any reduction in requirements could be absorbed by Federal Reserve sales of securities in the market. *This would in effect shift earning assets from Federal Reserve banks to member banks.* The present System portfolio is adequate to permit a substantial reduction and still leave enough to provide sufficient earnings to cover necessary expenses as well as for current purposes of policy. [Emphasis added.]

In the italicized sentence the Federal Reserve leaves no doubt that it would give the bonds to the member banks.

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[4] Congressional Record, July 1, 1959, p. 12514.

Was the bond giveaway bill passed into law?

Yes, but only after the House managers of the bill and Chairman Martin disclaimed any intention that the anthority being conferred would be used to give away or otherwise transfer any of the Federal Reserve's holdings of Government securities. The House conferees' report of the House stated:

> * * * it is not the intent of this legislation to encourage or cause the Federal Open Market Committee to reduce the Federal Reserve System's holdings of Government securities.

This statement of legislative intent is directly opposed to the original purpose of the bill, as conceived by the ABA.

Does the law as it passed give away any Government securities?

Yes. The Federal Reserve now permits private banks to use $2.6 billion of vault cash as reserves. This is the same as lowering required reserves by this amount and letting the banks create money which they may use to buy bonds if they desire. On the basis of the vault cash banks create aboute $15 billion of new deposits and may buy Government securities if they desire. The expansion of the money supply that occurred from mid-1960 to date (mid-1964) was partly fueled by the use of vault cash as reserves and partly by Federal Reserve purchases of Government securities. If the law had not been passed the Federal Reserve would have had to purchase still additional securities to have increased the money supply by the amount it did.

Is it desirable to give $15 billion of bonds to private banks?

No. They already receive almost $2 billion a year in interest from the Government; a $15 billion giveaway would increase these receipts by over a half-billion more. During the Eisenhower administration, reserve requirements were reduced nine times and the banks profited greatly. Reserve requirements should now be raised, and more bonds should go to the Federal Reserve, not the private banks.

Do private banks perform a service for the Government in buying Government bonds?

No, because they create money, which, in the last analysis, is an obligation of the Government to buy Government bonds, issued on the Government's credit. There is no risk involved. When private banks lend to private firms or individuals, they do perform a service because they are lending on the credit of an individual or firm. And they are allocating credit where it is most needed to nourish the private economy.

Could the Federal Reserve reduce its holdings of Government securities?

Yes. The Federal Reserve now owns about $33 billion in Government securities, but Federal Reserve officials have testified that they could get along on substantially fewer bonds than they now have. It is reasonable to believe that $15 billion of securities would be sufficient.

How should the Federal Reserve reduce its holdings?

Fifteen billion dollars of Government securities should be transferred from the Federal Reserve to the Treasury. This debt should then be canceled. This would reduce the public debt by $15 billion and reduce annual interest on the public debt by over a half-billion dollars.

CHAPTER IX

WHAT IS MONETARY POLICY?

Throughout the preceding chapters, the phrase "tight (or easy) money policy" was used liberally. Most people understand the phrase—in broad terms; but monetary policy is too important to be left to "broad terms." For it deals with the operating instructions of the managers of our monetary plant. Monetary policy is what fits the money industry into the structure of the economy.

But in specific terms, "monetary policy" has many definitions. Sometimes, although rarely in this book, it means the pattern the Government uses to erect a money system, and particularly the goals the Government has in mind as it monitors the moneymaking machinery. This is why monetary economists occasionally speak of "passive" or "active" monetary policy.

A government pursues a passive monetary policy by constructing a system which does not provide for any day-to-day or year-to-year decisions about influencing the volume or kinds of economic activity by monetary managers. The money supply is not manipulated to reach a specified economic target. This does not mean that interest rates do not move up or down in response to the rise and fall of demand for credit. They do. But the monetary managers pursuing a passive monetary policy do not cause these moves or modulate them by any deliberate action on their part.

What rules guide the monetary system in providing the money supply in this case? Broadly speaking, they are automatic, akin to the rules a thermostat follows in controlling a room's temperature. For example, the system can be told to increase the money supply by, say, 3 percent a year—the actual figure to be decided upon after considering the long-term growth rate of the economy and the associated monetary needs. Other, more complicated rules can be devised.

An *active* monetary policy is, obviously, the opposite. The Government grants the monetary agency both the power and the liberty to influence the economy, through deliberate and rather constant adjustments of the money supply valve. With an active monetary policy, the prevailing level of interest rates at any time results from a conscious choice by the central bank.

The United States has followed an active monetary policy for years—with activity reaching a peak after 1953, particularly during President Eisenhower's administration. Indeed, the economic ideology of that administration generally repudiated the use of any mechanism but the monetary for steering the economy. Almost exclusively, monetary policy was relied on to prevent inflation, regulate business activity, and promote other desirable ends. Despite its ideological precepts, however, the Eisenhower administration was compelled be-

cause of the tight money policies and their restrictive effect on the economy, to go into budgetary deficits in order to prevent an economic tailspin. Since 1960, active monetary policy has been used, but less exclusively.

Whatever the degree of activity, an active monetary policy, in the U.S. case, leads the Federal Reserve to reduce the money supply during certain periods—or to refuse to allow it to expand—in order to bring pressure on interest rates. In other periods, it does the opposite. In general, the Federal Reserve tries to restrain the economy when it operates at high levels and to stimulate business when recession grips. Or, to be precise, the Federal Reserve attempts to anticipate an economic upturn or downturn and react accordingly.

"Active" and "passive" describe the overall type of monetary policy. More common are the terms "tight money policy" and "easy money policy." And these terms, clearly, are the interesting ones once a government has opted for an active central bank. "Tight money"—as a reminder—refers to a policy of restricting the money supply in order to decrease the availability and raise the price of money. "Easy money" is the opposite.

One further general point, touched on in chapter I, is worth repeating. Active monetary policy only offers the choice of easier or tighter money. But the effects of monetary policy are so widespread that the same policy can be and is used for different purposes at different times with the fallout drifting where it will. For example, the Federal Reserve turned toward tighter monetary policy during the consumer buying upsurge of 1955 with the express purpose of cooling consumer demand for autos and other durables. The valve was turned tighter in the spring and summer of 1957 to restrain business investment in new productive capacity which, the money managers feared, was outstripping sluggish consumer demand. The result was a recession which lasted from July 1957 to August 1958. Again in late 1959 and early 1960 a tight money policy was pursued and interest rates rose. Again the result was a recession. This one began in May 1960 and lasted until February 1961. Finally interest rates began climbing in late 1961 and continued their rise to early 1962. Yet consumer demand has far from strained productive capacity during this period, and the low rate of business investment was an object of national concern. The new reason for the tighter monetary policy? The flow of dollars into foreign deposits and securities.

It is interesting to note that the steady rise in interest rates that began in 1961, has stabilized in recent months, probably due to the fact that the money supply was increased beginning in late 1962—an increase which may have been a "happy accident."

Enough was said in chapter I to indicate how a change in the money supply influences business activity. Here, again, there are some general observations to be made about the stock of money and the economy.

First, since our economy is growing and dynamic, economists almost unanimously agree that over the long haul the stock of money will have to grow—probably at about the same rate as the economy—if economic growth is not to be stunted. Failure to provide the money will spawn an era marked by deep recessions, abortive recoveries, low investment, high interest rates and chronic unemployment. This long-

term need for adequate growth in the money stock is the first commandment for monetary policy—active or passive.

Second, the effects of an easy money policy are not necessarily the exact opposite of those of a tight money policy. As economists put it, monetary policy is not "symmetrical" in its effect. Tight money, it is easy enough to see, can chill practically any boom. By making money tight enough investment can always be choked off. But easy money will not always kindle a burnt-out economy, as the 1930's cruelly illustrated. There has been some controversy among economists about this point in recent years. Still the generally accepted view is that an economy in a full-fledged depression such as that of the early thirties will not respond vigorously to cheap and plentiful money. (Note the qualification: full-fledged depression; a recession is another matter.)

The Federal Reserve authorities, who by and large agree with this view, sometimes use the analogy of the string. The Federal Reserve can pull on the purse strings but it cannot push them. Why can't it push on the string? First, money may be generally available and cheap, but borrowers must be willing to borrow for investment and banks must be willing to lend to those particular borrowers who apply for loans. But, during a depression, the prospects for business are so dismal and the weight of productive capacity so enormous that business firms are unwilling to borrow for equipment or inventory despite rockbottom interest rates. At the same time, banks are reluctant to lend to many of the would-be borrowers. With business after business on the verge of bankruptcy, everyone is a poor credit risk. And the banks must, of course, consider their own survival.

After these generalizations, the question can be asked, "What type of monetary policy has marked the Federal Reserve's actions over the years?" Though it will come as a surprise to anyone under 40, *active* monetary policies have not always been with us.

Indeed, just when monetary policies became active and where the Federal Reserve obtained its legal authority to engage in active monetary policies, is anything but clear.

Certainly when the Federal Reserve Act was passed in 1913 there was no thought, either in or out of Congress, that the country's monetary policy would be anything but passive. The main monetary problem the country had encountered was the periodic shortages of money. The Federal Reserve System was established largely to eliminate money shortages. The theory of the Federal legislation was that the ideal system would bring prompt, orderly, and automatic increases in the money supply in proportion to the need of trade and commerce. The economic activity of the country was not to be limited by the money supply; instead the volume of economic activity was to determine the money supply. A member bank of the Federal Reserve which lent all of its available funds and then needed additional funds to meet the credit requirements of trade and industry could automatically obtain the additional funds from the nearest Federal Reserve bank by posting eligible paper.

But by 1920, however, officials of the Federal Reserve were taking at least occasional steps to reduce the supply of money and credit in order to encourage general economic contraction and the reduction in prices which these officials thought desirable. At the time, the Federal

Reserve had no formal machinery for reducing the money supply. In 1920, therefore, they simply called the class A directors (themselves bankers) of the Federal Reserve banks to a meeting where they agreed that the Nation's important banks should be persuaded to call in outstanding loans and refuse to make new loans, thus producing a countrywide contraction of credit. This "voluntary" or conspiratorial contraction of credit greatly aggravated if it did not initiate the 1920–21 depression.

The largest volume of credit extended by the Federal Reserve to the banking system, before World War II, was reached in 1920. Thereafter, the Federal Reserve banks began to limit the amount of credit they extended to the banking system. Full *active* monetary policies, of the type we know today, were not then in evidence. Rather, from the recovery of the depression in 1921 through 1926, the Federal Reserve permitted a general expansion of the money supply, though with interest rates somewhat high by present standards. Then, in 1927, 1928, and 1929, a policy of restraint was followed, resulting in virtually no change in the money supply between August 1927 and August 1929. As mentioned earlier, the so-called credit excess which fed the wild speculations in the stock market in the late twenties was not an excess of credit relative to the needs of the whole economy. It was an excess because this credit was fed into the economy by way of loans to brokers, dealers in securities and the banking system, resulting, when the speculative bubble burst, in the start of a credit squeeze. The credit squeeze was followed by some extraordinary actions on the part of the Federal Reserve in the early thirties which resulted in the unbelievable—a one-third decrease in the money supply during the collapse of 1929–33.

Then the final turn in active versus passive monetary policy came with the Banking Act of 1935 which gave final form to the Open Market Committee.

The first annual report of the Federal Reserve System issued after passage of the 1935 act proclaimed that this act placed "responsibility for national monetary and credit policies on the Board of Governors and on the Federal Open Market Committee."

In truth, the 1935 act makes no mention of "monetary policy," "monetary powers," or "monetary controls." Nor does it contain any provision suggesting a change in the monetary policy that underlay the original Federal Reserve Act of 1913.

In short, after passage of the 1935 act, the Federal Reserve authorities of that day simply claimed responsibility for "monetary policies"—without explaining what they thought "monetary policies" meant.

In the period between passage of the 1935 act and the beginning of World War II, an active monetary policy was, on occasion, in evidence—in the sense that the Federal Reserve took certain deliberate actions to counteract or offset other events of the day. The best illustration of this involves a legislative action with which the writer was personally concerned. It has to do with the so-called soldiers' bonus. Let me explain.

During World War I there was a great increase in wages and, of course, many "war millionaires" were made. Those who served in the Armed Forces, however, continued to receive a low rate of pay, appro-

priate to, if anything, the 1915 wage scale. Specifically, soldiers in the trenches in France were paid $1 per day.

In a fit of conscience following the war, Congress decided to adjust the pay of the World War I veterans, retroactively. Instead of giving the soldiers their overdue pay in cash, however, the Congress provided for it in what was called a delayed compensation certificate. These certificates were to be paid off in cash when the veterans reached a certain age.

Now, during the great depression, many of these same veterans were, of course, standing in breadlines, selling apples on street corners, and otherwise suffering the fate of others in the great army of the unemployed. It occurred to me that under these circumstances, the compensation certificates should be paid in cash, without delay, not at whatever time the veterans reached the age specified in the certificates. Further, it seemed to me that the release of such a large amount of cash by the Government would be generally beneficial, providing (or releasing) added purchasing power over the whole country and thus helping to bring about economic recovery.

After a prolonged controversy, which involved several Presidential vetoes, this proposal was finally successfully enacted in 1936. The delayed compensation certificates were paid in August of 1936, putting several billion dollars' purchasing power into the cities, towns, villages, and farms of the country.

To add a personal note, it was my experience with this legislation which made me aware of money and banking matters and caused me to begin seeking an education on the subject, both from the monetary authorities in the Government and the written works on the subject. Even so, I was for several years puzzled as to why the release of these several billion dollars of purchasing power did not cause any big splash in the economic pond as I had expected, but indeed seemed to have no effect on the economy. In time, I learned that in June of 1936, the Federal Reserve raised reserve requirements of the member banks, in anticipation of the "inflationary" effects of the soldiers' "bonus" and, in fact, reduced the money supply of the country by almost the exact amount of the payments which the veterans received. The Federal Reserve prevented "inflation," to its way of thinking, but it proceeded to hobble the economy which had 17 percent of its workers already unemployed—and subsequently plunged the economy into the deadening relapse of 1937–38.

It would not be correct to suggest that because of the 1936 episode the Federal Reserve simply followed a tight money policy between 1935 and the beginning of economic recovery in late 1939. Actually, throughout this period, except for the 1937 blunder, member banks had large amounts of excess reserves—that is, reserves which they did not utilize to create deposits. In fact, this became the classic example of the limits to an easy money policy during a depression—"the push on a string" analogy mentioned earlier.

On the other hand, interest rates were maintained at a substantially higher level during this period than during the World War II years.

During World War II, the Government followed a variety of credit policies. One policy—a new departure—was direct restriction of consumer credit. This was provided by the so-called regulation W which

prescribed minimum downpayments and maximum terms of payment on consumer purchases of automobiles and other consumer durables. At other times, the Federal Reserve issued other regulations, imposing selective credit controls under wartime authorities enacted by Congress.

In the main, however, the policy of this period was to provide whatever amounts of money and credit were needed by the economy, which was turning out the largest possible amount of weapons and other supplies needed to fight the war and meet essential civilian needs at home. In this period, and indeed during the postwar years—up until March of 1951—the Federal Reserve maintained a market yield on Government bonds at less than 2½ percent. And all other interest rates were kept correspondingly low. For example, through a good part of this period, the market rate on 91-day Treasury bills was maintained below one-half of 1 percent.

World War II taught us many lessons. One was that our country need never again suffer from a prolonged depression like that of the 1930's. A conclusion almost unanimously reached was that if we could have full employment and have our economy produce the gigantic quantities of goods for the destructive processes of war, then we could likewise, in peacetime, maintain full employment and produce enough goods to eliminate poverty, ignorance, and disease in this country.

The great depression had been brought on, not by bad management in the private economy, but by the failure of Government to manage its affairs correctly, and most particularly the failure of Government to recognize and assume its role in the economy. If there were the right utilization and coordination of its resources and policies by the Government, then, no one then doubted, the private enterprise economy could and would provide full employment, maximum production, and maximum purchasing power.

This lesson which we learned from World War II, or at least thought we had learned, was much in the minds of the American people at the end of the war. Most of us were then highly resolved that never again would we permit any Government neglect or failure to deprive us of the benefits of our great potential for economic well-being. This high resolve was set down, furthermore, as declared national policy, in the Employment Act of 1946: Henceforth it would be the policy of the Federal Government—

> to coordinate and utilize all its plans, functions, and resources for the purpose of creating and maintaining, in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power.

Let us note that this declaration of policy does not say that Government shall replace free competitive enterprise. It says that the Government will coordinate and utilize its plans, functions, and resources in a manner to foster and promote free competitive enterprise, and in this way maintain maximum employment, production, and purchasing power.

When the Employment Act of 1946 was being debated and enacted into law, policies of the Federal Reserve had then been closely coordinated with those of the rest of the Government for a period of some

7 years. I happen to have been the House author of the Employment Act of 1946, and I appeared as a witness before the committees of both the Senate and the House handling the legislation. I believe, therefore, that I heard, both in Congress and in the general public arena, every question and every point of view which was then expressed concerning this legislation. I think that I have some basis for saying that when the act was passed, there was then no question in anybody's mind but that monetary policies would continue to be coordinated with the other policies and resources of Government. And so they were, until shortly before the famous Treasury-Federal Reserve "accord" of March 4, 1951.

Notwithstanding the clear language of the Employment Act of 1946, and notwithstanding the fact that the Nation was at war in Korea in the fall of 1950, top officials of the Federal Reserve began a revolt against the policies of the President and the Secretary of the Treasury.

As we have already noted, the Federal Reserve had held all interest rates at relatively low levels from late 1939 on. The rate on long-term Government bonds had been set at a maximum of 2½ percent, and actual interest yields throughout the period had been somewhat below 2½ percent. The rate on 91-day Treasury bills had been held at less than one-half of 1 percent until mid-1947, after which they fluctuated around 1 percent. Low rates on both short- and long-term Government securities meant, of course, low rates on bank loans to business and other borrowers.

In mid-August of 1950, however, the Federal Reserve raised the discount rate and short-term Treasury bills jumped toward 1½ percent, although there were requests from the Secretary of the Treasury and the President for the System to continue a low-rate policy. It was later revealed by testimony of some of the Federal Reserve officials to committees of Congress that the Open Market Committee had held a meeting on August 18 and decided not only to raise the discount rate, but to "go their own way" on the Government longer term bond rate as well, despite what the President, the Secretary of the Treasury, and the head of the Office of Defense Mobilization might do.

The disagreements between the Federal Reserve and the Treasury, and the efforts of the President of the United States to obtain the Federal Reserve's cooperation, were known to the public only in a general way at the time. The exact events were not made known until early 1952 when a Subcommittee on Monetary Policy and Management of the Public Debt (a subcommittee of which the writer was chairman) made a lengthy investigation and called the Secretary of the Treasury, the Chairman of the Federal Reserve Board, and other officials to testify.

According to the record, the main events were as follows:

Disagreements between the Treasury and the Federal Reserve in the late fall and winter of 1950 had several unsettling effects in the Government securities market. Indeed, they had resulted in "failures" of several Treasury issues of new securities made in an effort to finance the Korean war. In view of these conditions, the President of the United States called the Chairman of the Federal Reserve Board and the Secretary of the Treasury to the White House in early January 1951, and asked the Federal Reserve to continue holding the then existing rate on Government bonds. This official, according to later testi-

mony of the Secretary of the Treasury, gave assurances that this would be done.

Following the meeting, the Secretary of the Treasury made a speech, on January 18, announcing the policy which had been agreed upon. This speech strengthened the Government securities market, but several officials of the Federal Reserve promptly made public statements disagreeing with the policy. Further, on January 29, the Open Market Committee reduced its buying of long-term bonds, thus raising the interest rate somewhat.

As a result of these events, the President called the Chairman of the Board of Governors and the entire Open Market Committee to meet with him on January 31 to clarify the situation.

The results of the meeting were again announced to the press and the Government securities market settled down once more.

Then there began a series of meetings between the Federal Reserve, Treasury officials, and the chairman of several committees of Congress who were, it seemed, anxious to give support to the Federal Reserve's position in this squabble. Following these meetings, the Chairman of the Federal Reserve Board informed the Treasury, notwithstanding the assurances given at the January 31 meeting with the President, that the Federal Reserve was no longer willing to maintain the existing situation in the Government securities market.

After this development, the President asked the Federal Reserve and the Treasury to designate officials from the two agencies to try to work out the differences between the two agencies. On February 26, 1951, the President also appointed a four-man committee made up of the Director of Defense Mobilization, the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, and the Chairman of the Council of Economic Advisers, asking this Committee to study ways and means of providing restraints on private credit expansion, while at the same time providing stability in the Government securities market. At this meeting the President expresed his hope that the Federal Reserve would maintain existing interest rates until this Committee had reported. The Chairman of the Committee, the Director of Defense Mobilization, expressed a belief that the Committee could make its report in about 10 days, i.e., March 8.

Before 10 days passed, however, the officials of the Treasury and the Federal Reserve who had been given the task of trying to work out differences reached an "accord." This so-called accord was signed and given to the press on March 3, for public release on the following day, March 4, 1951.

The names of the cast in this drama may be of interest. Mr. Truman was, of course, President. Up until January of 1951, Mr. Marriner Eccles was Chairman of the Board of Governors of the Federal Reserve System, and, by reason of this position, also Chairman of the Open Market Committee. Mr. Eccles' term as Chairman of the Board of Governors expired on January 31, and President Truman refused to appoint him to a new term as Chairman because of his disagreement with the policy Mr. Eccles was urging, and most particularly with Mr. Eccles' part in raising short-term rates during the previous 6 months. Instead, Mr. Truman appointed as Chairman another member of the Board of Governors, Mr. Thomas B. McCabe. Mr. McCabe, incidentally, was one of the Republican members of the Board.

Here it should be remembered the term of a member of the Board of Governors is 14 years. Once appointed to membership on the Board, and confirmed by the Senate, a man cannot be removed by the President except in the case of misbehavior. The Chairman of the Board of Governors is chosen, of course, *from* among the seven members of the Board. The President designates a Chairman, and the member's term as Chairman is 4 years. Thus at the expiration of 4 years, the President may refuse to reappoint a member as Chairman, although that member may, if he chooses, continue as a member of the Board until the expiration of his 14-year term.

Mr. John Snyder was Secretary of the Treasury. Mr. Snyder was in the hospital during February and early March, with a serious eye operation, and did not participate in the meetings with the congressional committee chairmen or in the signing of the accord. Mr. William McChesney Martin was then Under Secretary of the Treasury and acted in Mr. Snyder's place in these matters.

Following the signing of the accord, Mr. McCabe resigned from the Federal Reserve Board; President Truman promptly appointed Mr. Martin to the Board and designated him as Chairman.

Since the signing of the so-called accord, in March of 1951, this event has been widely interpreted as an understanding, reached between the Treasury and the Federal Reserve, that the Federal Reserve would henceforth be "independent." It would no longer "peg" Government bond prices. It would raise or lower interest rates as it might see fit, as a means of trying to prevent inflation or deflation.

These are understandings which have been grafted onto the accord over the years. Certainly, no such understandings were universal at the time the accord was signed. Indeed, at that time the President and the Secretary of the Treasury, at least, appeared to have thought that the accord signified a settlement fairly close to the position the Treasury held, rather than an agreement that henceforth the country would have a freewheeling Federal Reserve which would spend the next 10 years sending interest rates into orbit.

Indeed, in the first month following the signing of the accord, the long-term rate on Government bonds rose imperceptibly. And, in fact, by December 1952, just prior to a change of administration, the long-term rate still had not been raised above 2¾ percent. (It was 2.47 percent in March 1951.)

For years now, both Federal Reserve officials and others, have created the impression that money and credit ran wild in the preaccord years. The postwar policies of the President and the Treasury, it is claimed, were totally misguided and, if continued would have led to an inflationary disaster. Just how bad were those policies?

(For background purposes, it should be remembered that, until the accord, the Federal Reserve stood ready to prevent the rate on Government long-term securities from rising above 2½ percent. This meant that if the private banking system wished to raise reserves, it could start selling Government bonds. As the price of bonds dropped, raising the market rate of interest on these securities, the Federal Reserve would eventually begin buying bonds and creating the desired reserves which would then allow the banks to expand the money supply. Of course, the System could always raise the reserve requirement behind the old money supply, canceling out the money-creating power of the new reserves.)

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Professor Emeritus Alvin Hansen of Harvard University, one of the most influential American economists of the past 35 years, supported the accord in principle. Yet he wrote in 1957, referring to the Board of Governors' views presented at hearings held by a subcommittee of the Joint Committee on the Economic Report, December 6 and 7, 1954:

> The reader gets a picture of a flood of sales to the Federal Reserve and a rapidly mounting money supply * * *. The result, we are told, was a "spiral of costs and prices." And again: "This inflationary process was stopped early in 1951 when the Federal Open Market Committee discontinued pegging the prices of U.S. Government securities." ["Pegging the price" refers to the Reserve's purchasing of Government securities to prevent the market rate of interest on them exceeding 2½ percent.] [1] Finally, the following: "The facts are * * * the country suffered a serious inflation until the Federal Open Market Committee abandoned the pegs."
>
> Now, the facts are, however, quite otherwise than here stated * * *. Federal Reserve holdings [of Government securities] were $5.1 billion less in June 1950, than December 1946 * * *. The money supply did not increase. Currency plus demand deposits stood at $110.2 billion in June 1950, and at $110 billion in December 1946. We did not have continuous inflation in the preaccord period. Wholesale prices in June 1950, stood at the same level as in September 1947, a period of nearly 3 years. Loans and investments of commercial banks remained stationary from 1946 to 1948 but rose moderately before Korea * * *. Money and bank credit were not running wild * * *.
>
> It would be difficult to find statements more misleading than those cited above * * *. The reader is lead to believe that there was a continued spiral of rising costs and prices all through this period. Nor is the reader informed that the price spurt following Korea was *stopped a month before the accord* [italic mine]—the weekly index reaching the peak figure on February 13, 1951.[2]

Notwithstanding these facts, the Federal Reserve people were quite sure that they could do a better job of running the country than the President, and with only slight increases in interest rates.

In the early part of 1952, a subcommittee appointed by Senator O'Mahoney, then chairman of the Joint Economic Committee, made a complete investigation of the circumstances of the so-called accord, the events leading to it, and the conflicting views on monetary theories which were then being urged. This subcommittee, of which I was privileged to be chairman, not only conducted hearings at which principal Government witnesses and leading economists were heard; we also surveyed Government witnesses and economists by questionnaire, in advance, allowing plenty of time for answers. All of these expert views were published in compendiums and hearings under the title "Monetary Policy and the Management of the Public Debt." I believe there was no doubt at that time that the Federal Reserve was contending for only very slight increases in interest rates. Indeed, I believe I correctly summarized the issue, as it was then drawn, in the foreword to part I of the volume of replies to questions which the subcommittee had posed, as follows:

> The Federal Reserve System has recently sought to lessen the availability and attractiveness of credit by making bank reserves more costly and more difficult to obtain. It sought to do this by raising the rediscount rate and conducting its open-market operations in a manner bringing about a small rise in short-term interest rates on Government securities. It is contended that fractional interest rate changes increase banks' needs for liquidity because of uncertainty as to whether additional reserves will be available, and at what cost. At the

[1] Comments within brackets are the author's and not Professor Hansen's.
[2] Hansen, Alvin, "The American Economy," McGraw-Hill, New York, 1957, pp. 74–77.

same time the market price of assets on hand is reduced and their sale thus made less attractive to the commercial banks. The objective is to force commercial banks to restrain credit expansion by rationing limited credit among potential borrowers. The Treasury meanwhile is attempting to follow a debt-management policy aimed at maintaining stable and low interest rates on Government securities, in the belief that a fractional increase in interest rates has no noticeable effect on the volume of credit and hence on inflation generally.

Monetary economists disagree as to the effectiveness and wisdom of attempts to dampen inflationary pressures by general credit control measures. Evidence based upon our own staff's study of the recent attempts in that direction has not been conclusive. The fact is that bank loans have continued to increase; what the increase might have been without the Federal Reserve System's efforts cannot be said.

If it can be demonstrated that increases in interest rates resulting in a rise in the service charges on the public debt have a measurable effect in reducing the volume of credit and in fact are responsible for holding down prices, including the prices of goods and services purchased by the Government, do not interfere with needed economic expansion, and do not unnecessarily increase the amount of cost of carrying the national debt, such facts would be arguments for allowing Government obligations to find their level in the open market ("Monetary Policy and the Management of the Public Debt," S. Doc. 123, pt. I, 82d Cong., 2d sess., pp. ix, x).

At the end of 1951, then, the Federal Reserve had both self-proclaimed independence, as a result of the accord, and an operational policy which aimed at maximum credit effects through minimum changes in interest rates. It then added another string to its bow—the "bills only" policy.

During the hearings held by the Subcommittee on General Credit Control and Debt Management in early 1952, at which Federal Reserve officials appeared, several members of the Committee enthusiastically offered the notion that the Government bond market should be "free." Since the Federal Reserve operates under congressional powers and is considered to be an arm of Congress, its officials are, to some extent, amenable to suggestions from prominent Members of Congress, particularly if these suggestions happen to be in accord with the thinking of the financial community.

In any event, the Open Market Committee appointed an ad hoc committee, composed of certain of its own members, to study the Committee's general credit policy. Further, the ad hoc committee was asked to comment on changes in the content or method of the then established policy. The committee made a report in November 1952, containing its recommendations, the most famous of which became known as the bills-only policy. Although this policy was only revealed to Congress and the public in 1954, it had by then become an established practice of the Open Market Committee, and was to continue as almost sacred ritual for the next 8 years.

The bills-only policy declared that henceforth the Open Market Committee, when trading in the so-called open market, would confine its activity to very short-term Government securities, preferably 91-day Treasury bills. Buying or selling Treasury bills in the open market means, of course, that the Federal Reserve adds to or subtracts from bank reserves, just as would be the case if it bought Government securities of any other maturity. In other words, the Open Market Committee intended to ease or tighten credit as it saw fit, as before, but its actions were to have a direct effect only on short-term interest rates.

Long-term rates would almost inevitably be affected, but only in an indirect way, and after an indefinite timelag. This was to be the so-called free market in long-term Government securities. No longer was the Federal Reserve to give any support to the Treasury. Henceforth when the Treasury issued bonds or medium-term securities, it was to dump these issues on the market and watch the natural consequences—first a drop in bond prices, then a gradual recovery as the market absorbed the bonds. Any private rigging or manipulations of the market were to go without interference from the Federal Reserve, as were any speculative booms or panics short of a "disorderly" market. The bills-only policy had only one reservation: The Federal Reserve would buy long-term bonds in the event that the Open Market Committee made a findings that the market was disorderly.

It would not be correct to suggest that there were no good arguments in support of the bills-only policy. On the contrary, some very astute and well-intentioned people worked out good theoretical arguments for the policy. These arguments had validity, however, only if the Federal Reserve was to be neither a part of Government nor a performer of any of the functions of Government—other than to issue the money in some automatic way.

If the Federal Reserve had played the role simply of adding to the money supply at some constant rate, leaving it up to the rest of the Government to handle the problem of general regulation, counteracting the business cycle, and so on, the bills-only policy might possibly have been appropriate. But the Federal Reserve did not adopt such a role. It assumed more—not less—responsibility for economic regulation, particularly after President Eisenhower took office in 1953.

Indeed, the Eisenhower administration, as mentioned earlier, ushered in a new era for monetary policy. The administration announced at the outset that it would rely on monetary policy exclusively for its economic regulation and would respect the complete independence of the Federal Reserve to carry out these policies as it saw fit. The more direct arrangements which had been adopted during the Korean war for restraining inflationary forces were promptly dropped. The Government's fiscal policy—its tax and expenditure policy—was to be aimed simply at balancing the budget, or at least talking about balancing the budget, rather than counteracting inflationary and deflationary forces.

But the new era found the Federal Reserve moving light-years away from its original idea that imperceptible increases in interest rates were the sure-fire antidotes for the country's economic ills. As the years went on, continued doses of higher interest were doled out and not in small capsules either. The result of the first small increases in rates left the Federal Reserve authorities unsatisfied. They obviously concluded, not that they had tried the wrong medicine, but that they had not used enough of it.

While the Federal Reserve has grown increasingly active in economic regulations over the past decade, it has also been aiming its fire to an increasing extent at specific targets, as compared to the econ-

omy in general. This is in sharp contrast to its theories of a decade ago, when it felt that a shot of credit restraint aimed at the economy in general would produce such universal results that nothing more would be needed. Its specific targets, furthermore, have been for the most part those which could be hit only by changes in long-term interest rates, not by changes in short-term rates. In other words, while the specific economic effects the Federal Reserve wanted to bring about could, by its own reckoning, be brought about only by changing long-term rates, it has nevertheless clung to the "bills only" policy by which it was able to change long-term rates only in the most ineffective and unreliable way imaginable. To put the matter another way, the "bills only" policy tied the Federal Reserve's hands as to changing the long-term rate with any precision, and at the time when it thought this rate should be changed.

For example, in the first 11 months of 1957, the object of the Federal Reserve monetary policy was to dampen what it considered to be an "investment boom." These officials hindered by "bills only" proceeded to make credit tighter throughout the whole economy. Consumer interest rates rose. Thousands of small firms were bankrupted, being unable to obtain the credit necessary to carry inventories. Yet all that the Federal Reserve claimed it wanted to do was slow down the building of new plants. Well, the investment boom, which was already staggering by early 1957, did crumple—with an assist from the Federal Reserve. And the economy slid into the stagnant bog, from which it has only recently emerged.

In the early part of 1958, the object of monetary policy was to stimulate more investment. This meant getting the long-term rate down. Still clinging to the "bills only" policy, the Federal Reserve gave the commercial banks repeated injections of reserves. In consequence, short-term interest rates promptly came down, but long-term rates stayed up. In fact, long-term rates declined so slowly and bond prices rose so gently that there developed a great speculative binge in the Government bond market. Elevator boys, used car dealers, and professional bond brokers were all borrowing directly or indirectly from the plentiful supplies of short-term funds to purchase Government bonds. They thought the Federal Reserve would not rest until it had driven bond prices up (and, thus, market yields down).

Actually, by the time the easy-money policy of the first half of 1958 began to exert a substantial effect on long-term rates, the Federal Reserve people thought, that economic conditions had changed and called for a turnabout in credit policy. The brakes were put on. In mid-1958, speculators realized Government bond prices were headed down, and the big debacle in the Government bond market resulted. Billions of high-riding dollars were lost in that infamous affair.

As we have said, the "bills only" policy permitted the Federal Reserve to come into the long-term market, on occasion, when it found the market to be "disorderly." In mid-1958, the Government bond market became "disorderly"—it seems to me extremely disorderly—and the Open Market Committee finally stepped in and lent some support.

Even after these experiences, however, when the Open Market Committee met in the early spring of 1959 to consider a policy for the year, it readopted the same old tried-and-found-wanting "bills only" policy. There was one dissenting vote. Mr. Hayes, the president of the New York Federal Reserve Bank, dissented, as he had done the previous year.

Only in February of 1961 did the Open Market Committee finally abandon its "bills only" policy. This was after repeated urgings from Congress and the newly elected President Kennedy. Then, too, new circumstances had arisen.

In early 1961, the United States was in an unenviable position. The country was both in a recession and suffering from a balance-of-payments deficit, deepened by a flow of dollars going abroad, seeking short-term investment at the higher oversea interest rates. The recession called for prompt reduction in the level of interest rates, to be achieved under "bills only"—by first driving down the short-term rate. But if the System energetically lowered short-term rates, it would simultaneously open the floodgates wider to the dollar flow abroad.

One sensible solution was to abandon "bills only." After all, business and State and local government borrowing for new equipment and new construction is at long-term rates. The same is true for home mortgage borrowing. If the long-term rate—quite high by postwar standards, especially for a recession period—could be brought down directly, without much effect on the short-term rate, most of the effect of easier money would be achieved. And with a stable, short-term rate, the payments deficit would not be intensified.

The dogma of "bills only" was finally refuted by the logic of hard fact, and long-term Government bonds were purchased by the Federal Reserve. Since then the System has not hesitated to enter the long-term market when the situation warranted.

The demise of "bills only" can be taken as the end of an era. For the new administration of Presidents Kennedy and Johnson lifted the monopoly of the economic control center held by monetary policy. It had become painfully clear that the monetary policy carried out by the Fed was not sufficiently expansionist to keep the country moving at a rate justified by the increase in the working force and industrial capacity. The two Presidents, with Congress voting the needed measures when necessary, began to apply the tremendous economic leverage the Government possesses as it taxes and spends.

The prime example, of course, is the $11 billion tax cut of 1964 aimed directly at spurring economic growth. There are others. The Treasury drafted a more favorable depreciation schedule for business, in effect increasing the after-tax return from capital goods invest-

ment. The Congress voted an investment "tax credit" doing more of the same. These two fiscal measures of 1962, it is widely agreed, gave a strong push to the sharp gain in business investment during 1963.

Then there is the most enlightening—because the most ingenious—measure of all, the "interest equalization tax." The very word "interest" spells monetary policy, but the tax is a fiscal measure: a substitute for an otherwise disastrous monetary move. Briefly, the United States, already coping with a large foreign payments deficit in 1963, was being overwhelmed by a flood of foreign long-term borrowing of dollars. Every extra dollar loaned to an oversea borrower would increase the payments deficit. What was to be done? The traditional monetary policy answer was: raise long-term interest rates. This would make all borrowing—foreign and domestic—more expensive. And at some rate, the flood could be stemmed.

Of course, anyone concerned about high unemployment and the waste of unused resources could not walk the monetary route, given the less than fully employed economy of 1963. Instead the administration proposed to place a tax on long-term investment in foreign securities, with some exceptions. And this alternative to higher interest rates, though not law at the time of writing, has cut foreign borrowing sharply. The economy consequently has not had to lose one extra dollar of investment or income, thanks to this fiscal initiative.

Has the new look affected monetary policy? Not at all. Leaning heavily on the balance-of-payments deficit, and warning ominously about inflation once again, the Federal Reserve still kept long-term Government interest rates at a higher level during the 1960–61 recession than their peak during the 1955–57 boom—despite the end of "bills only." As the recovery proceeded interest rates were kept fairly stable—and relatively high—until the last half of 1963 when the long-term rate was permitted to climb. By 1964, it was close to its postwar high—4.37 percent. Why the need for a higher restraining rate, especially since it directly contradicted administration policy? Judging from the public statements of the Chairman of the Board of Governors, inflation—even though the central bank's seismograph alone registered rumbles from this volcano.

Thirteen years have now passed since the accord and the liberation of the Federal Reserve. What have been the results? The major result is shockingly obvious. Interest rates have climbed steadily, with slight interruptions, during the entire postaccord period. (See table 3.) The period has been marked, then, by a continual shift of income to the banks, other major financial institutions, and individuals with significant interest income. The rest of the country provided this income.

TABLE 3.—*Yields on long-term Government bonds, by months, 1919 to present*

[Percent per annum]

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
1919	4.63	4.70	4.78	4.72	4.67	4.69	4.72	4.78	4.73	4.71	4.81	4.90	4.73
1920	4.93	5.05	5.09	5.28	5.58	5.54	5.57	5.67	5.43	5.08	5.21	5.40	5.32
1921	5.23	5.28	5.27	5.24	5.25	5.27	5.26	5.22	5.12	4.83	4.64	4.47	5.09
1922	4.45	4.50	4.41	4.28	4.26	4.24	4.14	4.12	4.19	4.30	4.33	4.32	4.30
1923	4.32	4.33	4.38	4.39	4.37	4.34	4.34	4.35	4.36	4.40	4.37	4.35	4.36
1924	4.30	4.28	4.28	4.23	4.15	3.98	3.94	3.91	3.92	3.87	3.90	3.96	4.06
1925	3.96	3.95	3.96	3.93	3.87	3.79	3.79	3.85	3.85	3.82	3.79	3.80	3.86
1926	3.77	3.71	3.71	3.70	3.67	3.67	3.68	3.70	3.70	3.68	3.62	3.56	3.68
1927	3.51	3.48	3.37	3.35	3.31	3.34	3.36	3.32	3.30	3.29	3.23	3.17	3.34
1928	3.18	3.19	3.17	3.20	3.24	3.29	3.42	3.48	3.46	3.47	3.38	3.45	3.33
1929	3.52	3.62	3.74	3.64	3.64	3.69	3.64	3.71	3.70	3.61	3.35	3.36	3.60
1930	3.43	3.41	3.29	3.37	3.31	3.25	3.25	3.26	3.24	3.21	3.19	3.22	3.29
1931	3.20	3.30	3.27	3.26	3.16	3.13	3.15	3.18	3.25	3.63	3.63	3.93	3.34
1932	4.26	4.11	3.92	3.68	3.76	3.76	3.58	3.45	3.42	3.43	3.45	3.35	3.68
1933	3.22	3.31	3.42	3.42	3.30	3.21	3.20	3.21	3.19	3.22	3.46	3.53	3.31
1934	3.50	3.32	3.20	3.11	3.02	2.98	2.92	3.03	3.20	3.10	3.07	3.01	3.12
1935	2.88	2.79	2.77	2.74	2.72	2.72	2.69	2.76	2.85	2.85	2.83	2.83	2.79
1936	2.80	2.77	2.71	2.68	2.66	2.66	2.65	2.61	2.60	2.62	2.53	2.51	2.65
1937	2.47	2.46	2.60	2.80	2.76	2.76	2.72	2.72	2.77	2.76	2.71	2.67	2.68
1938	2.65	2.64	2.64	2.62	2.51	2.52	2.52	2.51	2.58	2.48	2.50	2.49	2.56
1939	2.47	2.44	2.34	2.30	2.17	2.13	2.16	2.21	2.65	2.60	2.46	2.35	2.36
1940	2.30	2.32	2.25	2.25	2.38	2.39	2.28	2.25	2.18	2.10	1.97	1.89	2.21
1941	1.99	2.10	2.01	1.96	1.92	1.91	1.90	1.94	1.94	1.88	1.85	1.96	1.95
1942	2.48	2.48	2.46	2.44	2.45	2.43	2.46	2.47	2.46	2.45	2.47	2.49	2.46
1943	2.46	2.46	2.48	2.48	2.46	2.45	2.45	2.46	2.48	2.48	2.48	2.49	2.47
1944	2.49	2.49	2.48	2.48	2.49	2.49	2.49	2.48	2.47	2.48	2.48	2.48	2.48
1945	2.44	2.38	2.40	2.39	2.39	2.35	2.34	2.36	2.37	2.35	2.33	2.33	2.37
1946	2.21	2.12	2.09	2.08	2.19	2.16	2.18	2.23	2.28	2.26	2.25	2.24	2.19
1947	2.21	2.21	2.19	2.19	2.19	2.22	2.25	2.24	2.24	2.27	2.36	2.39	2.25
1948	2.45	2.45	2.44	2.44	2.42	2.41	2.44	2.45	2.45	2.45	2.44	2.44	2.44
1949	2.42	2.39	2.38	2.38	2.38	2.38	2.27	2.24	2.22	2.22	2.20	2.19	2.31
1950	2.20	2.24	2.27	2.30	2.31	2.33	2.34	2.33	2.36	2.38	2.38	2.39	2.32
1951	2.39	2.40	2.47	2.56	2.63	2.65	2.63	2.57	2.56	2.61	2.66	2.70	2.57
1952	2.74	2.71	2.70	2.64	2.57	2.61	2.61	2.70	2.71	2.74	2.71	2.75	2.68
1953	2.80	2.83	2.89	2.97	3.11	3.13	3.02	3.02	2.98	2.83	2.86	2.79	2.94
1954	2.69	2.62	2.53	2.48	2.54	2.55	2.47	2.48	2.52	2.54	2.57	2.59	2.56
1955	2.68	2.78	2.78	2.82	2.81	2.82	2.91	2.95	2.92	2.87	2.89	2.91	2.84
1956	2.88	2.85	2.93	3.07	2.97	2.93	3.00	3.17	3.21	3.20	3.30	3.40	3.08
1957	3.34	3.22	3.26	3.32	3.40	3.58	3.60	3.63	3.66	3.73	3.57	3.30	3.47
1958	3.24	3.28	3.25	3.12	3.14	3.20	3.36	3.60	3.75	3.76	3.70	3.80	3.43
1959	3.91	3.92	3.92	4.01	4.08	4.09	4.11	4.10	4.26	4.11	4.12	4.27	4.08
1960	4.37	4.22	4.08	4.18	4.16	3.98	3.86	3.79	3.84	3.91	3.93	3.88	4.02
1961	3.89	3.81	3.78	3.80	3.73	3.88	3.90	4.00	4.02	3.98	3.98	4.06	3.90
1962	4.08	4.09	4.01	3.89	3.88	3.90	4.02	3.98	3.94	3.89	3.87	3.87	3.95
1963	3.89	3.92	3.93	3.97	3.97	4.00	4.01	3.99	4.04	4.07	4.11	4.14	4.00
1964	4.15	4.14	4.18										

NOTE.—Long-term Government yields from January 1919 through Oct. 14, 1925, are unweighted averages of yields of all outstanding partially tax-exempt Government bonds, due or callable after 8 years, and those from Oct. 15, 1925, through December 1941 of all such bonds due or callable after 12 years. Averages for the 2 sets of bonds were identical from Oct. 15, 1925, through July 16, 1928. Beginning January 1942 through Mar. 31, 1952, yields are based on taxable bonds neither due nor callable for 15 years; beginning Apr. 1, 1952, through Mar. 31, 1953, on bonds neither due nor callable for 12 years. From Apr. 1, 1953, to present, series based on bonds maturing in 10 years or more.

Source: Board of Governors of the Federal Reserve System, "Banking and Monetary Statistics," 1953; Annual Report of the Secretary of the Treasury, 1958; and Treasury Bulletins.

The continued rise in interest rates, with its accompanying costs, could perhaps be defended as necessary if the economy had worked close to the limit of its resources most of these past 13 years, or had exhibited a recurrent tendency to sharp, steep price increases. But this was not the case. True, it could be argued that the resource criterion was met during 1951–53, and possibly the price criterion

during 1956–57. (See table 4.) But after 1957, as the mounting unemployment percentage and the trendless wholesale price index show, neither criterion for another shot of high interest was fulfilled. The irony of the situation is that long-term interest rates remained close to the old 2½-percent ceiling during most of the first period—favorable to high interest—and started their steep climb only in late 1955.

TABLE 4.—*Unemployment and industrial wholesale prices, 1949–63*

Year	Unemployment as percent of civilian labor force [1]	Industrial wholesale price index (1957–59=100) [2]	Year	Unemployment as percent of civilian labor force [1]	Industrial wholesale price index (1957–59=100) [2]
1949	5.9	80.0	1957	4.3	99.2
1950	5.3	82.9	1958	6.8	99.5
1951	3.3	91.5	1959	5.5	101.3
1952	3.1	89.4	1960	5.6	101.3
1953	2.9	90.1	1961	6.7	100.8
1954	5.6	90.4	1962	5.6	100.8
1955	4.4	92.4	1963	5.7	100.7
1956	4.2	96.5			

[1] New definitions; after 1960 includes Alaska and Hawaii.
[2] All commodities other than farm products and foods

Source: Economic Report of the President, January 1964.

How does the Federal Reserve justify this Alice-in-Wonderland policy? Inflation. After 1957? Yes. What inflation? it might well be asked. And that is exactly the point. As the industrial wholesale price index shows there has been nothing which even hints of inflation in the price of industrial goods since 1958. By crying inflation these past years, as in their justification for the accord, the Federal Reserve is indulging in public mythmaking. There has been no inflation, either during the depressive stagnation of 1958–61 or during the hesitant recovery of 1961–64. Surely if the economy were as inflation prone as the Federal Reserve solemnly reiterates, some evidence of it would have appeared these past 6 years.

Perhaps, it can be argued, as some Federal Reserve authorities have done recently, that the price record is a testimony to their high-interest policy. Without it inflation would have occurred. What can be said? In the first place, the argument is irrefutable but worthless. Who knows what would have happened if—? Second, if the statement is true, the monetary authorities are indirectly saying that monetary policy can only keep prices stable by crippling economic growth and saddling the economy with widespread unemployment and idle capacity. For these were the conditions under which the economy operated the past 6 years—with the Federal Reserve throwing its weight toward restraint. Is this the price the economy must pay to stop inflation? It seems the Federal Reserve think so.

The argument, then, simply confirms the sour lesson of our 13-year monetary experiment. Small doses of higher interest or even a mild recession will not stop price rises in the modern economy.[1] Whatever the variety of ways rising prices may be stopped, there is one sure-fire method: a protracted period of underemployment for men and ma-

[1] It is necessary to distinguish between "demand-pull" inflation and "cost-push." The latter occurs when several groups can push up prices even when general demand is not high enough to take all the goods the economy could produce.

chines. And, since monetary policy can do only two things—stimulate or repress the economy—it is obvious what the monetary authorities will do if they think they sense inflationary tremors. They will slam the brakes and slow the economy to a prolonged crawl.

The inflation argument has had help from the balance-of-payments deficit the past 3 years in justifying monetary policy. The interest rate the System is mainly concerned with, for foreign payments purposes, is the short-term rate. But by keeping that rate high, they have also automatically kept the long rate higher than otherwise called for. The reason is that except under unusual circumstances, the bond market will keep long-term rates higher than short term. Therefore, even though the Federal Reserve adopted a policy of keeping long-term rates as stable as possible in 1961–62, it could not go further and bring these rates down without threatening to drive short-term rates down as well—an event which would have nullified its payments deficit policy. And, when the System raised short-term rates in mid-1963 to 3½ percent, publicly giving the payments deficit as the reason, the long-term rate also moved up in normal sequence.

Just what has the Federal Reserve tried to accomplish with its high short-term interest policy? Well, the short-term capital outflow, generously defined, ran at approximately $2 billion in 1960, $2.4 billion in 1961, $1.5 billion in 1962 and $1.1 billion in 1963. Thus the Reserve authorities tied their hands with regard to the long-term rate during the 1960–61 recession and the high unemployment years subsequently to keep $2 billion annually, at the most, from flowing overseas. How much did it cost the economy to use monetary policy for this purpose? No one knows. But it would not be farfetched to think that over a 4-year period many billions of dollars worth of investment, and even more billions of dollars worth of production and income were forgone. Add in, as well, the very real personal tragedy of unemployment.

Once again the bitter lesson of the postaccord period is drawn, this time with respect to the balance of payments. Was there no other way to prune a $2 billion outflow—a comparatively small amount considering our $600 billion economy—than by first cutting domestic business investment and output by many billions of dollars while the economy was running at less than full speed? This is really letting the tail wag the dog. But it is exactly what will result if monetary policy is used as a jack-of-all-trades. Monetary policy is most inefficient. It produces much costly fallout. And there is the counterexample of the "interest equalization tax" to show what can be done to control capital outflows at minimum social and economic cost.

Another result of postaccord monetary policy is that the U.S. economy has unwittingly become a low investment economy. This point is extremely important. Because if we operate our economy with perpetually high interest rates—and this seems to be the outlook unless something is changed—then, even though we manage to have full employment, say, because of fiscal measures, the economy will invest less than it otherwise would with low interest rates. This implies slower growth of output because of lower efficiency gains and smaller additions to capacity. In other words, by instituting a high interest policy a country chooses to grow more slowly than it otherwise could. Clearly, such a choice is a critical one for a country to make. And, for the past 7 years, the Federal Reserve has chosen the high interest, slower growth option for this country. (See table 5.)

TABLE 5.—*Rate of investment and long-term interest rates, 1946–63*

Year	Business expenditures for new plant and equipment as percent of gross national product	U.S. Government taxable bonds [1] (percent per annum)	Year	Business expenditures for new plant and equipment as percent of gross national product	U.S. Government taxable bonds [1] (percent per annum)
1946	7.0	2.19	1955	7.2	2.84
1947	8.8	2.25	1956	8.4	3.08
1948	8.5	2.44	1957	8.3	3.47
1949	7.5	2.31	1958	6.9	3.43
1950	7.2	2.32	1959	6.7	4.08
1951	7.8	2.57	1960	7.1	4.02
1952	7.6	2.68	1961	6.6	3.90
1953	7.8	2.94	1962	6.7	3.95
1954	7.4	2.55	1963	6.7	4.00

[1] First issued in 1941. Series includes bonds which are neither due nor callable before a given number of years as follows: April 1953 to date, 10 years; April 1952–March 1953, 12 years; October 1941–March 1952, 15 years.

Source: Economic Report of the President, January 1964.

The purpose of the table is not to show that the drop in business investment as a percentage of gross national product is mainly the result of the high-interest policy of recent years. It is to show that the economy has been devoting a smaller proportion of its resources to investment than it had previously (with no evidence that the previous proportion was "too high," by any reasonable standard for "too high"). And, throughout this period, Federal Reserve policy has been in the direction of smaller investment.

Is a low-investment economy (in percentage terms) what the American people want? Certainly it is not what their last two Presidents have wanted, judging from the emphasis on economic growth in their public statements. It is also not what Congress has voted for. Quite the contrary. But it is what the country now has as a byproduct of the Federal Reserve's unhindered ministering to the country's health.

Finally, a third result of postaccord monetary policy should be mentioned here. It illustrates in a quite unexpected way how far the consequences of recent monetary policy reach.

In fiscal year 1963, the U.S. Government paid out approximately $10 billion as interest on the national debt. The budget deficit for the same year was $8.8 billion. Much political hay was made with the deficit. It was potential inflationary dynamite, ran the "no deficit" claim. And these same people strongly supported tighter money and higher interest rates to prevent the otherwise inevitable inflationary explosion.

Yet if these people were really worried about the deficit, they should have been rabid partisans of a low-interest policy. For it can be shown that last year's deficit would have been $5 billion less if the Government had not been forced by Federal Reserve policy to pay increasingly more on its outstanding debt. In fact, the total national debt would now be $40 billion less if the interest rates of the early 1940's had prevailed in the postwar period.

This is what table 6 shows. In 1946, the Government paid an average rate of 1.8 percent on its debt. In 1947, interest rates went up. The Government paid out $5 billion in interest. At the 1946 rates it would have paid out $0.4 billion less. This means the deficit in 1948 was $0.4 billion higher than it need be. The Government could have used the $0.4 billion paid out in extra interest in 1947 to reduce the

debt carried over into 1948. In 1948, then, the debt at 1946 interest rates would have been $251.9 billion (col. 4) rather than the actual $252.3 billion (col. 3).

TABLE 6.—*Higher interest and U.S. Government debt*

[All figures are in billions of dollars]

Fiscal year	Actual interest paid	Actual debt	Reduced debt	1.8 percent on reduced debt	Budgetary saving
(1)	(2)	(3)	(4)	(5)	(6)
1946	4.8	269.4		4.8	0
1947	5.0	258.3		4.6	.4
1948	5.3	252.3	251.9	4.5	.8
1949	5.4	252.8	251.6	4.5	.9
1950	5.8	257.4	255.3	4.6	1.2
1951	5.7	255.2	251.9	4.5	1.2
1952	5.9	259.1	254.6	4.6	1.3
1953	6.6	266.1	260.3	4.7	1.9
1954	6.5	271.3	263.6	4.7	1.8
1955	6.4	274.4	264.9	4.8	1.6
1956	6.8	272.8	261.7	4.7	2.1
1957	7.3	270.5	257.3	4.6	2.7
1958	7.7	276.3	260.4	4.7	3.0
1959	7.7	284.7	265.8	4.8	2.9
1960	9.3	286.3	264.5	4.8	4.5
1961	9.0	289.0	262.7	4.7	4.3
1962	9.2	298.2	267.6	4.8	4.4
1963	10.0	305.9	270.9	4.9	5.1
Total saved					40.1

The Government paid $5.3 billion in interest in 1948. On the reduced debt, at stable rates, it would have only paid $4.5 billion (col. 5). The Federal budget would have been $0.8 billion less because of reduced interest. The national debt, then, would not have grown by $0.5 billion during fiscal 1948, but rather dropped by $0.3 billion due to the interest saving. This is shown in columns (3) and (4). In column (3) the debt carried over into 1949 is $0.5 billion higher than 1948, whereas in column (4) it is $0.3 billion less because of the saving.

For each postwar year the savings are computed. Obviously after 17 years of climbing interest rates the added unnecessary debt being carried is a significant figure—about 13 percent of the total national debt. And the excess interest charges have now mounted to about $5 billion a year—almost half of which goes to banks, financial institutions, and other corporations.

What does table 6 prove? Mainly, that interest touches at every point of our complex economic society. Raising interest rates is not a simple solution to straightforward economic problems, because interest will not work in a simple fashion. In the deficit case, high interest actually defeats the very purpose of those who say they fear the presumed inflationary potential of Government deficits and want tight money.

Perhaps these observations can best be summed up by two broad conclusions about monetary policy. First, an active monetary policy pursued by an agency that takes its own soundings of the economy and subsequently acts on its own initiative without consultation is a costly luxury for a modern economy. It entails the constant use of the monetary sledge hammer to crack economic policy walnuts.

Second, a self-sufficient central bank, as other countries' experiences confirm, tends in the long run to follow a high-interest policy. This is quite understandable. Despite the long list of desirable economic goals which the central bank may cite as guiding its hand, invariably one consideration seems to predominate—an ever-threatening inflation. Why? Because of the natural perversity of central bankers? Not at all. Rather, it is the result of the particular control system entrusted to the central bank.

A central bank controls the money supply. And inflation is the one economic ailment which is directly susceptible to the monetary cure. No inflation can last long if money is made tight enough (the economy may meanwhile be gasping for breath, but that is another matter). Other problems which may afflict the economy—underemployment, stagnation, recession—cannot be laid as directly and uniquely at the central bank's door as can inflation. Either "natural" forces or an unwillingness to use fiscal policy can always *share* the onus for a slack economy.

Therefore, a central bank inclines toward concentrating on the one problem for which it seems to bear sole responsibility—inflation. Now there is only one way a central bank can try to contain inflation: by keeping interest rates high and the economy somewhat sluggish. And this is what central banks have traditionally opted for time and again over the long run. The Federal Reserve is no different. As this brief résumé of postwar monetary policy indicated, if honorable men look for inflation hard enough, they can convince themselves they have found it. Most of us then pay the price of being preserved from a monster which the evidence suggests is a mere phantom.

CHAPTER X

WHAT IMPROVEMENTS ARE NEEDED IN THE MONEY SYSTEM?

As we have seen, the money system is man made. Invented by man, revised by man, and controlled by man; it is as Abraham Lincoln said, "the creature of law." Therefore, there is no reason to conclude that the system is perfect. The process of improving the monetary system has not reached a final stopping place any more than has the process of improving the social and economic order.

Yet, while changes have been made, the money system has generally proved resistant to change. Some improvements have been accepted, but they have lagged behind progress in other areas of the economic system. And changes of any consequence have usually been adopted only as crisis measures, following large-scale panics or breakdowns in the economic system. Only at such times has the public focused its attention on money management and demanded reform strongly enough to overwhelm the bankers' traditional resistance to change. Between crises, money management becomes a mysterious art, incomprehensible and often uninteresting, to the public and to legislators; it is in these periods, all too often, that partial reversals of previous reforms are obtained.

The purpose of this chapter is to suggest specific reforms in our monetary system, the need for which, it is hoped, the preceding chapters have made evident. In only a few cases do these reforms require changes in law; for the most part they are permissive under present law. Indeed, they are implied responsibilities of the Federal agencies, which have been established in the monetary area in the public interest. The reforms are being presented when a crisis atmosphere is absent, in the hope that people will finally turn the rational, unfevered thought to the monetary system that its preeminence in the fabric of our daily lives requires.

Most, though by no means all, of the reforms are aimed at the main problem raised by this book: how to bring monetary management under genuine public control in order to coordinate monetary with other public policies. The original intent of the Federal Reserve Act was to create such control; that intent is still valid and more necessary than ever. Our Government must squarely face the challenge of recapturing the wheel of its monetary system.

THE FEDERAL RESERVE AND "INDEPENDENCE"

The topic of Federal Reserve "independence" has been so befogged by a smokescreen of lofty rhetoric in these past years that it is necessary to nail down some fundamentals, even at the risk of repetition, before anything concrete can be said.

What does Federal Reserve independence mean in practical terms? It means, first, that Federal Reserve policymakers produce their own separate diagnosis of the economy's needs at any time, by examining the economy with the aid of the System's large staff of economists. But diagnosis is only the beginning of policy. Frequently, the various coexisting needs of the economy call for monetary actions which contradict each other—unemployment requires stimulation; an inflationary situation requires restraint. The policymakers, therefore, must compile a list of priorities, either implicit or explicit, to decide which need or needs will be met, and how fully, by their policy. The "independent" Federal Reserve managers rely on themselves, and themselves alone, to decide the priorities which guide their policy.

Completely autonomous policymaking, then, is one aspect of Federal Reserve independence. Still, a qualification should be inserted. The System's managers do not live in a vacuum. They know what the President, the Congress, and the administration's economic policymaking branches are thinking and doing. But this knowledge is only grist for the System's policymaking mill. The System is under no obligation, as it sees it, to support any of those policies or to defer to the conclusions of the other policymakers.

Clearly, independent economic policymaking, in this sense, invites clashes between the Federal Reserve and the other parts of the Government. First, thousands of economic facts are thrown up every day, week, and month. The trends one group distills from these facts are not necessarily identical to another group's distillations. A great deal depends on the original viewpoint. Then, there is the all-important schedule of priorities. If the Federal Reserve's schedule differs from, say, the President's, it is sheer luck if the accelerator and brake pedals are not both pressed down at the same time. So, for the two reasons given, conflict and contradiction between the Federal Reserve and other policymaking bodies can easily occur. Sometimes the conflict is direct, as during the accord period.

There is still more to Federal Reserve independence. Consider the Congress. In many ways it qualifies, aside from the Presidential veto, as independent. It decides what bills to consider. It votes bills up or down, making up its own mind. If it feels strongly enough, it can force policies he dislikes on the President, etc. Yet every 2 years on election day, the House and one-third of the Senate lose their independence. The policies they have followed are approved or disapproved by the people, and if the policies are disapproved, the next "independent" Congress will reflect the people's disapproval. Some change will occur. Congress, however independent otherwise, is accountable to the people for its actions.

Now consider the Federal Reserve. True, the central bank is an arm of Congress, but it is not responsible to Congress, in any meaningful sense. The system does not present an annual report to Congress explaining or justifying its policies. It does not ask Congress' approval of its actions, nor does Congress review them as a normal part of its business.

The greatest control Congress exercises over agencies, executive or legislative, derives from its power over the purse. But here again the Federal Reserve escapes legislative control. It provides its own reve-

nues, from sources other than appropriations. It spends as it wishes from income—mostly derived from interest on its huge Government bond holdings.

Nor is the system responsible to the executive branch. The 14-year term of the Board of Governors makes the board only slightly accountable to any single President, though they are appointed by the Executive. (Under ordinary circumstances, a President can appoint four of the seven-man board by the end of his sixth year.) But the board is not the crucial policymaking body. The Open Market Committee is. And the other members of the Open Market Committee—the regional bank presidents—are responsible to their respective bank's board of directors, if indeed they are responsible to anyone, for their policy decisions. In addition, since the system is granted immunity from the appropriations process, the Federal Reserve is not subject to any systematic Executive review arising from the budgetmaking process.

Finally, the system is not directly responsible to the people for its actions. Its members do not face elections.

Moreover, the system eludes even the audit control exercised by the General Accounting Office, whose function it is to make sure that other Federal agencies not only handle their financial affairs properly but also pursue policies and practices that are in accord with the law. The system provides for its own auditing; clutching its mantle of independence, it has stoutly resisted repeated congressional suggestions that the General Accounting Office perform an annual audit. (The theory seems to be that whoever holds responsibility for money, credit, and bank regulation is above the ordinary requirements of law.)

A slight acquaintance with American constitutional theory and practice demonstates that, constitutionally, the Federal Reserve is a pretty queer duck. It exercises wide power in the area of economic policy, both in formulation and execution—a matter which intimately affects our everyday life. It would ordinarily be assumed where such power is present that democratic control was being exercised over the central bank, at least indirectly, through the ballot box. Yet this is not the case. In fact, the combination of economic power and freedom from control by either the other branches of Government or the electorate has led some people to label the Federal Reserve, with much truth, "a fourth branch of the Government." And, indeed, some officials of the central bank are apt to use phrases such as "quasi-judicial" in describing the system's functions, suggestive of a branch like the judiciary, independent yet unelected.

How does the Federal Reserve, fiercely jealous of its independence since the Accord, justify its admittedly unusual status? Here is a sample of the Federal Reserve's position, taken from hearings held in early 1964 by a subcommittee of the House Banking and Currency Committee. The first statements are by Mr. William McChesney Martin, Chairman, Federal Reserve Board:

> [The Federal Reserve Act created] [1] a structure that places trusteeship over the creation of money in a body that is insulated from shortsighted pressures for abuse of that money * * * ("The Federal Reserve System After 50 Years," p. 10).
>
> Because money so vitally affects all people in all walks of life as well as the financing of Government, the task of credit and monetary management has unique characteristics. Policy decisions of an agency performing this task are often the

[1] Phrases within brackets are mine and not the speaker's.

subject of controversy and frequently of a restrictive nature; consequently, they are often unpopular, at least temporarily, with some groups. The general public in a democracy, however, is more apt to accept or tolerate restrictive monetary and credit policies if they are decided by public officials who, like the members of the judiciary, are removed from immediate pressures ("The Federal Reserve System After 50 Years," p. 23).

Mr. Alfred Hayes, president of the Federal Reserve Bank of New York said:

The achievement of our long-term goals can, and frequently does, call for measures that are unpopular in the short run. * * * I think it is of great importance that the persons charged with executing monetary policy, with making these decisions, retain freedom—freedom in a practical sense—to make unpopular decisions ("The Federal Reserve System After 50 Years," p. 531).

[The Federal Reserve should not be required to submit to the appropriations process] because it would break through the safeguards that the Congress has been careful to provide, against the possibility that partisan influences might be brought to bear on the System's policymaking processes ("The Federal Reserve System After 50 Years," p. 530).

Boiled down to essentials, what Mr. Martin and Mr. Hayes are saying is the following: The monetary side of economic policymaking is somehow unique. It affects everyone. Frequently it involves "unpopular action" (read "adopting a tight money policy") which hurts many people. For what purpose? To prevent "abuse of that money" (read "to prevent inflation"). But the action is taken for the long-run good of the country.

Unfortunately, according to Fed spokesmen, many people only take a shortrun view of their welfare and must be protected against such a shortcoming. These people in a democracy, may have representation in Congress or the ear of the President. Either of these two could then be influenced by "shortsighted pressures" (read "inflationary views"). If the Federal Reserve were held accountable for its actions one of the two branches of Government might well bring "partisan influences to bear on the System" (read "would perpetually hamstring tight money policies"). Therefore, the people must cede their control over monetary policy to a group of men who, acting as trustees of monetary policy, would take the long-term view of the people's welfare and do for the people what the people or their representatives, blinded and misguided by immediate pressures, would be unlikely to do in their own best interest.

A good deal has been invested in trying to sell these views to the public. The banking community has been an ardent champion of Federal Reserve independence. Could this possibly be because the managers of the Federal Reserve have shown that they are addicted to a view of the economy that is particularly to the liking of the bankers and other financial men? Naturally these groups would think it vitally important that the present arrangements continue undisturbed. Where profits are concerned, partisan views are not considered shortsighted.

This is not to say that the fervor which permeates the financial industry's campaign for Federal Reserve independence is simply the result of self-seeking. Undoubtedly the bankers are convinced that economic wisdom is only the possession of a special few, and that they are acting in the best interests of the country by promoting independence. In the tradition of bankers, they deeply mistrust democratic governments in the management of money matters. They are

haunted by the fear that, given control of its money system, the Government would hurtle pellmell into inflation, thereby effectively canceling a great part of the debt and otherwise wrecking the established order. (In view of their record for the past 100 years, the bankers' credentials for recognizing superior economic wisdom when it exists are certainly dubious.)

The financial institutions have picked up natural allies. The newspapers and most other organs of public enlightenment solemnly warn at every opportunity that the independence of the Federal Reserve must be "preserved"—to prevent rampant inflation. The inference is clear, and sometimes even flatly stated, that the "politicians" must be kept from destroying the dollar. Even in the Halls of Congress, the self-appointed guardians of the sound dollar argue that Congress set up the Federal Reserve as an independent agency and echo much of the Federal Reserve's own position.

Just as an aside, the financial community's deep concern about inflation has its curious side. The bankers advocate an independent Federal Reserve because, they say, they want a fearless application of tight money when inflation looms. But these very same men, who have been manifesting massive alarm at inflation for at least as long as the 35 years the writer has been in Congress, have never been alarmed enough—even when inflation *was* rampant—to launch a campaign for higher taxes to sop up excess purchasing power. And yet the only true inflations the dollar has undergone in the past 25 years—from World War II through 1946 and the first part of the Korean war—could only have been avoided by increased taxes not by tight money. Nor was the financial community found manning the defenses against the premature removal of price and rationing controls at the end of World War II, when industry could not yet satisfy war-deprived consumer demand inflated by large wartime savings. And, of course, bankers have never suggested raising reserve requirements to counteract inflation.

But what of the Federal Reserve's own case for a central bank, neither subordinate nor responsible to any branch of the Government or the people, operating monetary policy in splendid isolation from any democratic control processes?

A major premise of that case is that if the System were in any way made accountable to the President or Congress, or even subjected to the routine of an annual audit by the United States General Accounting Office, an inflationary breakthrough would somehow follow. This notion, that America is inhabited by a populace which would clamor for inflationary monetary policies if their elected officials had some relation, however tenuous, to monetary policy, is considerably at odds with the political realities. The hardships which result from inflation fall not on the wealthy, whose family fortunes may undergo some reduction in purchasing power, but on the low- and middle-income families who live on fixed incomes, have pension credits or modest savings set aside for their children's education, their old age, and so on. It would be hard to find a practicing politician today who does not know that inflationary policies lose more votes than they gain. Indeed, during the past 13 years there has been no public outcry against tight money, despite the economy's evident misfires, because the press and trusted political figures have assured the public that tight money was necessary to avoid inflation.

There is something else to be said about inflation and the "politicians." As the Federal Reserve well knows, a rising price level, when it does threaten, cannot normally be contained by monetary policy alone except at considerable damage to the other economic desirables, full employment and maximum economic growth. Even mild recessions will not turn the trick. What may conceivably work to achieve both price stability and adequate economic performance is enlightened restraint on the part of business and labor in their wage-price policies.

Now the job of promoting such restraint has naturally fallen to the President with all his powers to cajole and persuade. And both Presidents Kennedy and Johnson and their staffs have worked long and hard, sometimes at possible political cost, to maintain price stability. Are these the politicians who, as captives of partisan influences, are taking the shortsighted view of the country's needs? Does the Federal Reserve think that appeals for price and wage restraint is the demagogs' way to popularity with business and labor? Moreover, what those suspect politicians have realized is that monetary policy, far from needing to operate independently, must have the active cooperation of the political leadership of the country for a nonsuicidal approach to price stability.

But there are many more issues raised by Federal Reserve independence than just the most efficient manner of organizing army headquarters in the anti-inflation campaign. First, there is the odd presumption that the monetary policymakers must be independent because their actions have widespread effects and are frequently unpopular. Well just how unique is this? Fiscal policy—the imposition of taxes—is certainly widespread in its effects, and paying taxes has never yet won a popularity contest. Yet Congress has raised taxes when necessary. (And took a long, hard look at President Kennedy's $11 billion tax cut before passage—an "unpopular" delay, certainly.) Still a straight application of the Federal Reserve's logic would have Congress authorize an independent "fiscal policy board" to formulate fiscal policy.

What about foreign policy? It involves matters of war and peace, life and death. Nothing is more central to our daily lives. Frequently foreign policy involves "unpopular" actions—sending men to fight in Korea or "advise" in South Vietnam. Should we then have an independent "foreign policy board" to make and execute foreign policy free from "partisan influences" and not responsible to the President, Congress, or public opinion?

Asking the question answers it.

We insist in our democracy—it is almost the essence of the system—that fiscal and foreign policymakers be held responsible, however indirectly, to the people for their policies.

Why should monetary policy be treated differently?

Second, the notion that the Federal Reserve should formulate the monetary side of the economic policy uncoordinated with the economic policy of the President is totally misguided. The President is elected by the people. He is normally elected after having articulated some views on economic policy during his campaign. President Kennedy, for example, heavily stressed the economic theme of "getting the country moving again" in his campaign. Should the President

then find himself faced with an independent Federal Reserve Board which is, perhaps, less eager to get the country moving as fast as the President wants? Should not the President be able to fashion a total package of economic policies, including monetary ones, as he sees fit to carry out his program? Certainly the monetary authorities should have the right and duty to counsel and advise. But should the President have to *ask* the central bankers not to nullify the intended effects of his policy package, as President Johnson did in his 1964 Economic Report—referring to the tax cut program and some subsequent tighter money statements by prominent members of the Open Market Committee?

It might be said that an independent Federal Reserve is necessary to temper any mistakes of the President. But the President is our Chief Executive. Once Congress has accepted his program, the President is responsible for its successes or failures. If the President makes mistakes, there is an electorate ready to correct him and the pliant Congress.

Further, the Federal Reserve has more than its share of monetary blunders in the record book. Why should the central bank become a supreme economic policy review board with the power to nullify the effects of the President's policies? Are they the ideal group for such a job, assuming the country wants the job done? They may be getting wiser, but the events of the past 13 years show that perfection is a long way off.

Moreover, having an independently authored monetary policy is just a recipe for chaos. Monetary policy, as is known, is only one way to guide the economy. Fiscal policy is another. They are both powerful and they are both effective. But the managers of monetary policy insist on their right to turn the economy in any direction they wish regardless of the direction fiscal policy is taking. As things stand now, economic policymaking is run like a dual control car driven by two drivers, one of whom insists on his independent right to use his own brake and accelerator as he and he alone sees fit. It is pure luck, if the motor is not constantly stalling. To say the least, this is a most inefficient way to get anywhere.

We have not been that lucky. The Federal Reserve has, at times, deliberately pushed down on its brake at the very time the President and Congress were pressing their accelerator. A case in point is the early months of President Kennedy's administration as the economy floundered in recession. Or at other times, the Federal Reserve had decided to press its brake when the administration was already lifting its foot from the accelerator. The result is an exaggerated deceleration, much greater than the independently acting Federal Reserve expected. An unhappy example, of this is the action taken in late 1959 which led to the 1960 recession. There are many other examples.

This is no way to run economic policymaking.—Both the speed and direction signals controlling the economy should come from one, and only one, source. Just the plain commonsense need for minimum efficiency calls for some degree of subordination of monetary policy to the fiscal policy programs of the President and Congress—for it cannot be the other way round in our democracy.

Aside from the economic and social engineering questions involved in Federal Reserve independence, the System's position on independ-

ence raises issues, as has been said, which go right to the heart of democratic theory and practice. Consider the trustee notion, i.e., the implied idea that since people do not know what is good for them—or know that they need castor oil, but won't swallow it—a group of men should be given the right not only to decide what is good for the people and take action, but also to decide and act without being held accountable for their actions.

This kind of elite group, "papa knows best," thinking both smacks of arrogance and is utterly alien to the principles of American democracy. The essence of democracy is that the people decide for themselves, through their elected officials, what is good or bad for them. Issues are presented to the people and the people decide every 2 years how they want them handled. This is what representative democracy is all about. If someone were to suggest that foreign or fiscal policy be placed in the hands of a totally independent, unaccountable body because those issues are too complicated to be understood correctly by the people, they would be laughed out of court.

Yet this is what the Federal Reserve is implicitly suggesting about monetary policy. Are the issues dealt with by monetary policy so difficult that people cannot understand what is at stake? By no means. The fundamentals of money can be understood by anyone. Monetary economics is not nuclear physics.

There is another side to the trustee notion as well. What the Federal Reserve is asking for is power—enormous economic power for good or ill. And they say, "Trust us. We need this power unfettered by any responsibility to anyone. You must allow us to do as we like—though, of course, we always have your best interest at heart." But, as every high school civics student knows, our Constitution provides for a system of checks and balances. Further, our society does not promiscuously hand out deeds to power without responsibility. All power derives from the people. And the holders of power, almost without exception, are either responsible to the people directly or indirectly through elected officials for their stewardship of this power. The Federal Reserve's idea that, as a trustee, as opposed to a steward, it should be responsible to no one for anything—extending down to the disposition of Federal Reserve funds—simply runs counter to everything Americans have believed about power and responsibility since the founding of our democracy.

There can hardly be any doubt of this. In fact, at the early 1964 hearings, held by a subcommittee of the House Banking and Currency Committee, referred to previously, two leading American economists, identified with different sides of the political spectrum, vigorously agreed on this point. Prof. Milton Friedman, of the University of Chicago, who has counseled Senator Goldwater, stated at the hearings:

> Should there be a truly "independent" monetary authority? A fourth branch of the constitutional structure coordinate with the legislature, the executive, and the judiciary? That is the central issue involved in judging the present organizational structure of the Federal Reserve System.
>
> * * * it is most undesirable politically to give so much power in individuals not subject to close control by the electorate ("The Federal Reserve After 50 Years," pp. 1133–1134).

Prof. Paul Samuelson, of the Massachusetts Institute of Technology, an economic adviser to President Kennedy during the 1960 presidential campaign said:

> A central bank that is not responsible is irresponsible rather than independent. To be responsible means to be responsive. It need not mean being responsible to each month's 50.001 percent of Democratic opinion, or being responsive to the articulate minority which, at the moment, seems stronger than any other minority.
>
> But it does mean being responsive to the changing values, views, moods, and even fads of the American citizenry.
>
> It occurs to me to quote E. B. White's definition of "democracy." As I remember it, he said: "Democracy is the recurring suspicion that more than half the people are right more than half the time."
>
> * * * But the central bank should never be thought of as an island of isolated power, as a St. George defending the economy against the "dragon" of inflation and frenzied finance. As Edmund Burke said nearly two centuries ago: "The age of chivalry is dead—that of responsible, democratic government has succeeded" ("The Federal Reserve After 50 Years," pp. 1107–1110).

Finally, we might consider what may be regarded in some quarters as a minor detail: Congress has never given authority for determining monetary policy to the Federal Reserve System—and certainly not to a committee within the System containing members who owe their selection to private bank interests.

As has been previously pointed out, the Federal Reserve Act was designed in 1913 on what is sometimes called the full convertibility theory. In that day it occurred to no one that America would try to produce too much. The difficulty which the framers of the Federal Reserve Act were trying to correct was not too much money, but a periodic shortage of currency which strained the banking system. In consequence, the Federal Reserve System was conceived—and designed—as an agency that would automatically provide whatever increases in currency and the money supply where needed to accommodate business. It was not conceived, as is now the case, as an agency to restrict the money supply for the purpose of restricting the volume of business. The 1913 act gave the Federal Reserve banks the central task of discounting eligible paper in order to supply the member banks with the volume of credit needed to accommodate industry and trade. The Federal Reserve Board was given authority only to review and determine the discount rates at which the Federal Reserve banks would stand ready to supply needed credit.

This basic authorization has not been changed by any amendments to the Federal Reserve Act made to date. Yet two evolutions have taken place within the Federal Reserve System, in one instance, without authorization, and, in the other, directly contrary to the expressed intent of the Federal Reserve Act.

First, as has been indicated, the Federal Reserve was created to provide an automatic money supply; this function has been replaced, in practice, by a conscious and deliberate effort to provide the quantity of money which the Federal Reserve authorities think appropriate for economic regulation. This effort was already in evidence before the general revisions made in the Federal Reserve Act in 1935. But after passage of the 1935 act, officials within the System began proclaiming that the Federal Reserve now had "responsibility" for national monetary policies. The First Annual Report of the Board of Governors after passage of the 1935 act opened with a statement that

the act "places responsibility for national monetary and credit policies on the Board of Governors and the Federal Open Market Committee"—although the act contained no reference whatever to monetary policy nor any provision which indicated a change in the convertibility concept on which the 1913 act was drawn. In brief, the Federal Reserve's "monetary policies," as they are practiced today, were never authorized by law.

The monetary powers, as has frequently been pointed out, are reserved to the Congress by the Constitution. There is no doubt that it is within the prerogative of the Congress to delegate these powers—either to the executive branch of the Government or to an independent agency. But it is not within Congress' constitutional means to delegate these powers without prescribing policy objectives and clear guidelines detailing how the powers may be used. Inevitably, the Supreme Court has held unconstitutional those grants of powers made without any spelling out of the specific objectives and limitations placed on their use.

The Supreme Court held the National Industrial Recovery Act to be unconstitutional and put an end to the NRA's economic regulation, not because the Congress lacked powers which it might delegate under the commerce clause of the Constitution, but because Congress had attempted such delegation without an adequate law defining and limiting the purposes for which the powers were to be used. There is little doubt in the author's mind that if any legal challenge were ever raised to the Federal Reserve's monetary policies, the courts could hold them unconstitutional.

This was one permutation the System has completed—a more or less passive supplier of money became an active regulator of economic activity. The second, is that referred to in an earlier chapter as the "power revolution" within the Federal Reserve System. That is, the shift toward open market operations for active regulation and the subsequent formation of the Open Market Committee—with voting rights on monetary policy given to five regional bank presidents and persuasion rights to all 12 presidents.

This second change, whatever else it accomplished, did open the door to private banker influence in the formation of monetary policy. *The regional bank presidents have become policymakers.* At the very least, the type of man chosen to become the president of a regional bank affects the bent of Open Market Committee thinking. Now the private bankers have the dominant voice in choosing the regional bank presidents. *They are hardly likely to choose and retain men as presidents whose approach to monetary matters does not in general conform to their taste.*

Consider these two evolutions in the light of independence. By the 1930's, the country found itself with monetary policy being decided by a group of men some of whom were selected for membership in the group by private interests. However far this may have been from the original intention of President Wilson, some consolation could be found in the fact that, after all, the President was still assumed to have the last word in overall economic policymaking. Then came the accord. And the country suddenly had the worst of both worlds—monetary policy decided by a group accountable to no one for its actions, while, at the same time, the group did not even have

the minimum virtue of being composed solely of public servants, in the full sense of that term. Independence, then, can be viewed as the capping of the "power revolution." It has partially transferred immeasurable power into the hands of the regional bank presidents, who started their existence with no economic policy power at all. And through the bank presidents, an industry whose profits rise and fall with monetary policy, has been allowed to impinge on monetary policymaking—however remotely, however indirectly. Much of this has occurred, as stated earlier, without authorization by Congress.

What do these considerations add up to? Just the following: independence serves no useful purpose, is based on erroneous views of the maturity of the public, flies in the face of our democratic institutions, creates irrational and chaotic divisions of responsibility in economic policymaking, violates the spirit of our Constitution, represents a presumptous power grab by the central bank, and is unauthorized by law.

Central bank independence should be tolerated no longer.

The central bank must be brought back into the Government. The Federal Reserve must be made responsible, and responsive, to the economic policymaking decisions of the President. Money must be managed for one purpose or another. To repeat the ancient truism, "money does not manage itself." Let it be managed, then, not in ways which counteract and conflict with the Government's other, considered policies, but in ways calculated to supplement and help effectuate those policies.

NEEDED FEDERAL RESERVE REFORMS

What legislation is needed to bring about coordination and harmony among the Government's policies with respect to monetary management, debt management, and fiscal and tax policies? In a sense, none. The authority is already provided in existing laws; not the Federal Reserve Act, but the Employment Act of 1946. Indeed, the Employment Act of 1946 not only authorizes coordination of the policies mentioned, it requires it. The act declares that it shall be the continuing policy and responsibility of the Federal Government "to coordinate and utilize all of its plans, functions, and resources" for the purposes stated in the act. The central purpose is "to promote maximum employment, production, and purchasing power," and, it might be added, "in a manner calculated to foster and promote free competitive enterprise and the general welfare."

But though the law exists and the duty is clear, the Federal Reserve has still managed to go its independent way. Therefore, it is the duty of Congress to assert its sovereignty over the monetary affairs of the country once again. The major thrust of the legislation, of course, should be to cut the ground out completely from all Federal Reserve claims to independence. The Federal Reserve must be made a clearly defined arm of the Government. Yet there is more to be done. Changes in the Federal Reserve System since 1913 have distorted the public nature of the central bank. Some of these changes must be reversed, by legislation, to erase any doubt that monetary policymaking is in the hands of men who take the widest possible view of the public interest. Finally, some of the operations and procedures of the Federal Reserve, discussed in this book, should be changed. The purpose is to assure that the public interest is served. Some of the

changed procedures require legislation, others do not. They all require a more consistent public-spirited attitude than the System has demonstrated to date.

The first 5 sets of reforms are contained in proposals submitted for discussion by all of the 8 Democratic members of the Subcommittee on Domestic Finance after hearing testimony on the Federal Reserve's structure and policies in 1964.

The full text of the subcommittee's press release, including the proposed reforms, is published below:

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON DOMESTIC FINANCE
OF THE
COMMITTEE ON BANKING AND CURRENCY

EIGHTY-EIGHTH CONGRESS

WASHINGTON, D.C.

(Press release for Sunday a.m., June 28, 1964)

THE SUBCOMMITTEE ON DOMESTIC FINANCE OF THE HOUSE BANKING AND CURRENCY COMMITTEE RELEASES "PROPOSALS FOR IMPROVEMENT OF THE FEDERAL RESERVE"

The Domestic Finance Subcommittee today submitted for circulation and discussion a set of corrective proposals to strengthen the Federal Reserve System. All of the Democratic members of the subcommittee joined in this action. The Republican members did not join in the release.

The Democratic members of the subcommittee are Wright Patman, chairman (Democrat, Texas), Henry S. Reuss (Democrat, Wisconsin), Charles A. Vanik (Democrat, Ohio), Claude Pepper (Democrat, Florida), Joseph G. Minish (Democrat, New Jersey), Charles L. Weltner (Democrat, Georgia), Richard T. Hanna (Democrat, California), and Charles H. Wilson (Democrat, California).

The text follows:

"PROPOSALS FOR IMPROVEMENT OF THE FEDERAL RESERVE SUBMITTED FOR DISCUSSION BY THE SUBCOMMITTEE ON DOMESTIC FINANCE

"We have heard considerable testimony on the Federal Reserve System. The testimony strongly suggests that some revision of the System is indicated to improve future monetary policy and thereby our economy's performance, in accord with the Employment Act of 1946. A set of corrective proposals which emerges from the testimony given before the subcommittee is presented herewith for further consideration.

"We are not suggesting, of course, that these proposals cannot be improved upon. While the subcommittee has not settled on any specific proposal, it intends to consider the entire set in public hearings after the next Congress convenes in January 1965. The proposals, though preliminary and tentative, are circulated at this time to allow for full study and discussion by the Congress, the executive branch, the Federal Reserve, and the public:

"A. To emphasize the public character of the Federal Reserve:

"1. Provide for the retirement of the Federal Reserve stock.

"2. Vest all power to conduct open market operations in the Federal Reserve Board.

"B. To increase the effectiveness of monetary policy by assuring the recruitment of an outstanding Federal Reserve Board and an adequate response to advances in economic knowledge:

"1. Remove the present requirement that the President, in selecting Governors of the Federal Reserve Board '* * * shall have due regard to a fair representation of the financial, agricultural, industrial, and commercial interests and geographical divisions of the country.' Instead, require only that the Governors be men of integrity devoted to the public interest.

"2. Reduce to five the number of Governors of the Federal Reserve Board.

"3. Reduce to 5 years the terms of office of the Governors and allow for reappointment.

"4. Make the term of the Chairman of the Board of Governors coterminous with that of the President.

"5. Raise the salaries of the Governors.

"C. To insure public control over the expenditures of public monies:

"1. Provide for a public audit by the Comptroller General of all expenditures by the Federal Reserve Board and the Reserve banks.

"2. Provide for paying into the Treasury as miscellaneous receipts all capital gains and interest received by the Federal Reserve from U.S. Government securities.

"3. Authorize appropriations by the Congress of the expenses of the Federal Reserve banks and the Federal Reserve Board.

"D. To provide statutory guidelines for monetary policy and assure coordination of all of the Government's economic policies in achieving the goals of the Employment Act of 1946:

"1. Require that the President set forth in his periodic Economic Reports, in conjunction with his recommendations on fiscal and debt management policy, guidelines concerning monetary policy, domestic and foreign—including the growth of the money supply, as defined by him—necessary to attain the goals of maximum employment, production, and purchasing power of the Employment Act of 1946.

"2. Express the sense of Congress that the Federal Reserve operate in the open market so as to facilitate the achievement of the President's monetary policy; and require that the Federal Reserve, if its monetary views and actions diverge from those recommended by the President, file with the President and the Congress a statement of reasons for its divergence, in form like the President's Economic Report.

"E. To allow for greater specialization in performing the monetary control function:

"1. Permit the Federal Reserve Board to concentrate on monetary policy by transferring its present bank supervisory functions to the Comptroller of the Currency, the FDIC, or, alternatively, to a newly created Federal banking authority."

F. In addition, the Federal Reserve System should immediately undertake studies appraising the effectiveness of their present methods of controlling the money supply. It may well be, as recent economic studies indicate, that the Federal Reserve's control of the money supply is defective—leading to the kind of divergencies economists have observed between what the Federal Reserve claims it is doing, with respect to the money supply, and what has actually happened.

G. The cost and benefits of using tight money as the most important checkrein on the economy should be reappraised (if, indeed, the Federal Reserve has ever made a thorough appraisal of the subject). The Federal Reserve should consider alternate ways to obtain the same effects—their efficiency and seemliness. It is my confident belief that the policy of raising interest rates from one plateau to another with each period of business recovery has few if any beneficial effects, while it has played havoc with the Nation's general well-being. Restoring interest rates to saner levels will materially cut the $11 billion yearly cost of carrying the Federal debt, make corresponding reductions in the Federal budget, and trim down the billions of dollars of purchasing power which have been transferred from the budgets of low- and middle-income families into the budgets of the interest-income families.

H. The Federal Reserve System should buy a larger portion of new U.S. securities issues directly from the Treasury, then sell them in the open market when sales are propitious and coordinate with overall monetary policies. This would make the Reserve banks the dealers in U.S. securities. Only the Government's central bank can hold and carry out an orderly marketing of large quantities of Government securities, just as only the central bank can carry out monetary policies. Isolating the central bank from the function it can best perform is an absurdity indeed.

Most industrial nations of the world have long since recognized this and placed debt management affairs in the hands of their central banks. Quite aside from the advantage of coordinated Treasury and central bank operations, Federal Reserve management of the Federal debt would result in two direct financial savings to the Government: First, the present system, by which the Government first asks the large financial institutions what they will pay for a new obligation, then issues the obligation at a price (or interest rate) which the buyers are determined to have, will be eliminated. The Government would

no longer be the captive of a few large and well-coordinated buyers of Government securities.

Second, direct purchases by one agency of the Government from another would save, for the Government, the security dealers' cost—and profit—which now enters into the indirect transactions between the Treasury and the Federal Reserve.

As was pointed out in the previous chapters, by having one agency of the Government supporting the other, the interest costs on 91-day Treasury bills—which recently were at 3½ percent and above—never rose above one-half of 1 percent during World War II and the years immediately following. Similarly, the interest costs on long-term Government bonds never rose above 2½ percent—until the Federal Reserve System seceded from the Government in 1951. Furthermore, it will be clear to those who have read the previous chapters, that the purchase and holding of large amounts of Government securities by the Federal Reserve during the World War II years had no connection with the increases in the money supply made in those years. Those increases in the money supply resulted from other conscious and deliberate policy decisions—including the decision to let private banks create large sums of money to acquire and hold Government securities.

I. The Federal Reserve should divide the money-creating power between the Federal Reserve banks and the private banks more favorably to the taxpayers and less favorably to bank profits. In short, under responsible public control, the Federal Reserve banks will hold more Government securities—returning the interest payments to the Treasury—and the private banks will hold less. At the present time the Federal Reserve authorities have divided the Government's money-creating powers between the Government and the private banks on a basis of about 1 to 7. In many years of questioning high experts on the matter, I have yet to hear even one plausible answer to the question why the Government should extend money-creating powers to the private commercial banks to be used, without cost, to create money which is then lent to the Government at interest. It is entirely reasonable that the Federal Reserve should, without reducing the present level of bank profits, arrange future additions to the money supply in ways which will gradually bring about a 1-to-4 division of the Government's money-creating power, with commercial banks ultimately owning a smaller percentage of the outstanding Government securities, and the Federal Reserve owning a larger one. This can be accomplished by raising reserve requirements back to the 1953 level.

J. The Federal Reserve System should revitalize the practice of extending Federal Reserve credit to the banking system through the 12 regional Federal Reserve banks, particularly through restoration of the practice of discounting eligible paper. This could be aided by making the discount window a matter of right rather than privilege. As the Federal Reserve System was originally designed, and as it originally functioned, it extended credit to banks of the various localities as it was needed to meet the needs of local business, farmers, and individuals. When the present custom of extending substantially all Federal Reserve credit to the banking system through open market operations in New York was adopted, Federal Reserve authorities brought into being a small group of professional Government securities dealers. All purchases and sales of Government securities by the Open Market Committee are funneled through these dealers in New York. Therefore, the reserves created by the Open Market Committee first see the light as reserves of the New York banks. The System then relies upon the operations of securities dealers to distribute reserves to the parts of the country where they are most needed. This system has worked very poorly, simply because the original owners of the Government securities sold to the Federal Reserve, through dealers, are likely as not located where the new reserves are needed least. To illustrate, if an insurance company located in Omaha decides to sell some Government securities to a securities dealer, the new credit which the Federal Reserve extends to the banking system goes to banks in Omaha—whether Nebraska needs credit or not. The banks in Omaha may already have an excess of loanable funds, while the banks in Peoria, say, do not have sufficient credit to supply the needs of their customers. A particular bank trying to sell eligible paper to its Federal Reserve bank—at a discount—provides the best evidence of where Federal Reserve credit is needed.

When the Federal Reserve banks again make more of their extensions of credit to member banks by direct means, they will be performing more of the banking functions for which they have responsibility. The highly questionable

importance of a small group of open market dealers will be correspondingly reduced.

K. The Federal Reserve should create an open market in fact, as well as in name. The discussion of the Federal Reserve's use of its authority to buy and sell securities in the "open market," to use the words of the statute, revealed that the Federal Reserve has, in fact, created a very closed market. Not only is the trading restricted to only 21 professional dealers, but for many years this trading went on with only a minimum public knowledge that the so-called market even existed. High Government officials, bankers, authorities on money and banking, and even prominent Wall Street operators were unaware of the so-called open market. It is probably only because the writer has made some repetitive noises in Congress about this so-called market that its existence has come to enjoy the rather limited nonanonymity it enjoys today.

NEEDED FDIC REFORMS

The chapter on the operations of the Federal Deposit Insurance Corporation should have left no doubt that basic changes in the FDIC's role are needed. FDIC's function should be restricted to that of deposit insurance. It should not, as it is now doing, let examiners substitute their judgment for private management's decisions about bank operations.

If the commercial banks are to serve the credit needs of their communities, and particularly the needs of small business, they must assume prudent risks. They cannot, as the FDIC bank examiners insist, confine their lending to gold-plated, doubly secured loans. Insurance is one thing; bank management is something else again. True, life insurance companies all have a stake in their policyholders' good health and longevity. But by insuring our lives the life insurance companies do not get the right to tell us what to eat, when to go to bed, and how to preserve our health.

By the same token, performing the deposit insurance function does not warrant the FDIC's assuming the function of maintaining a closed shop for banks. Whether or not a new group wishing to enter the banking business causes inconvenience or competition to the banks already established is no proper question for the FDIC. It should promulgate objective standards of eligibility for deposit insurance, and it should be required to issue deposit insurance to any comers who meet those standards.

NEEDED TREASURY REFORMS

With the mechanics of debt management operations properly in the hands of the Federal Reserve System, most of the Treasury's objectionable operations in this field will come to an end. The practice of seeking advice from buyers will be eliminated; so, too, will the practice of leaning on underwriters—professional distributors and profiteers—to find ultimate buyers of Treasury securities.

This leaves for correction, however, the Treasury's present practice of leaving on deposit with the private banks an average of $4 billion of Treasury funds. It has been argued, of course, that the Treasury leaves this minimum deposit with the banks, interest free, to compensate them for various services to the Government. Not the least of the services claimed—and this is not made in humor—is that the commercial banks purchase Government securities. It would appear, therefore, that there is a theory that the Government should not only extend its money-creating power to the banks, cost free (to be used to extend credit to the Government on an interest basis) but

that the Government should also leave the funds thus created with the banks who can then lend them to still other borrowers at interest.

A minimum balance of $4 billion of Treasury funds in private banks means, of course, that the Federal debt is at all times considerably higher than it need be; taxpayers are paying the interest charges on the excess debt. For compensation, the taxpayers should receive interest on Treasury deposits left with the commercial banks. If substantial services are rendered the Government by the commercial banks, then appropriate fees for these services should be negotiated and paid the banks directly. I have introduced legislation to this effect.

OBJECT OF PROPOSED REFORMS

What principles should guide public policy toward the private commercial banking system and the use by the private banks of the Government's power to create money?

Late in 1941, and again at the beginning of 1943, I succeeded in obtaining committee consideration of a proposal of mine which was to have the Federal Reserve System purchase—on an interest-free basis—all obligations issued to finance the war which could not be placed at the then prevailing interest rate with individuals and savings institutions. The object was to draw on savings to the maximum amount possible; having failed to sell to individuals and savings institutions, the remainder was not to be placed with the commercial banks on bank-created money.

Mr. Marriner Eccles, who was then Chairman of the Federal Reserve Board, objected on the grounds that bank profits were then low and bank costs, like all other costs, were rising. As a consequence, reasonable bank profits would have to be maintained by one means or another. In conclusion, Mr. Eccles said that the banks would have to "increase all kinds of service charges and the question whether the public that paid the service charges to the banks under these circumstances would be better off through that process than they are with the present process." (Hearings before the Committee on Banking and Currency, House of Representatives, 77th Cong., 1st sess., on H.R. 5479, 1941, p. 1349.)

Mr. Eccles' point is well taken. On the face of it, commercial banks are highly socialistic institutions. From one angle, they "live off the Government," using the Government's money-creating power free of cost and receiving a variety of other more or less direct subsidies from the public purse. The essential point is, however, that the private banks provide a necessary public service through use of the Government's money-creating power. They create money to lend to individuals and private business firms. Such loans involve an element of risk. They require an element of judgment, and so private risk taking.

The Government does, of course, make direct loans to individuals and business firms in certain instances. But when the Government makes loans to private citizens, the lending must, to the maximum extent, be made on the basis of objective standards under which all would-be borrowers are treated alike, not on the basis of intuition. Risk taking often involves seemingly arbitrary discrimination, which is understood and acceptable conduct for a private bank; as the conduct of Government, it would be intolerable.

This suggests that the guiding principle for immediate monetary reform should be encouragement of commercial bank lending to business and consumers—indeed, there is a crying need for an expansion of such lending—and discouragement of commercial bank lending to the Government.

As has been previously suggested, the only reason why the Government should extend its money-creating powers to private banks is, in the last analysis, to guarantee enough bank profits to assure adequate banking services for the general public benefit.

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