THE FUNCTION OF THE FEDERAL RESERVE SYSTEM
IN THE AMERICAN ECONOMY

An address by
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My assignment today, as I understand it, is to discuss the role of the Federal Reserve System in our national economy. Before launching into a discourse upon the purposes, functions and techniques of central banking - or, as some in this country prefer to say, "Federal Reserve banking" - it occurs to me that it is desirable to approach by way of a consideration of two things. First, we need to consider a bit of political philosophy which lies behind the kind of central bank we have in the United States. Second, we need to consider a basic power of the Federal Reserve banks upon which much of the influence and effectiveness of the Federal Reserve System rest. Having these concepts clearly in mind, we shall be prepared to discuss briefly, but understandingly and in perspective, the System's purposes, functions and techniques.

The traditional approach to my subject tends to assume that everybody understands both the basic political philosophy behind our central banking system and also the roots of its power. I am more and more convinced that this is not so. Furthermore, I am more and more convinced that without fairly complete understanding of these fundamental concepts there will be considerable difficulty in comprehending purposes, functions and techniques.

Among the sources of material pertaining to the matters of which I shall speak today, I commend to your attention the published documents of the Congressional Subcommittee on General Credit Control and Debt Management, which, under the chairmanship of Representative Wright Patman, recently assembled what is doubtless the most detailed body of data on central banking since the National Monetary Commission of 40-odd years ago. Three volumes of materials gathered by the Subcommittee in documentary form and in oral testimony, together with the document containing expositions of the views of the Subcommittee's members, are and for a long time will be of inestimable value to students of the subject before us today.

I have said that our first approach concept will be in the field of political philosophy. I use the word "philosophy" with some reluctance, because it is so much overused and misused in the often turgid literary style of the day. One holding a pet theory or belief of some kind is apt to refer to it as "my philosophy". What I am about to say is not my philosophy; it is a matter of history.

In the long struggle between crown and parliament in Great Britian, and in a similar struggle between the British crown and the colonies in America, control of the public purse was a high point of greatest strategic importance. Counterparts of these struggles can be found in many places throughout the pages of human history. It is not at all surprising that the founders of the United States of America took careful and, in my judgment, wise steps to retain power over the public purse in the hands of the people themselves, as nearly as possible. Our nation came into being under a system of divided powers, and the doctrine of separation of powers was profoundly conceived as a means of curbing attempts by the executive or any other arm of government to seige and exercise power beyond that which the people desire it to have. Consistent with that aim, the founding fathers in their wisdom lodged exclusively in the legislative branch of the government - the directly elected representatives of the people - these important purse powers: (1) the power to tax; (2) the power to appropriate for expenditure; and (3) the power to issue money. The converse of the exclusive grant of these powers to the legislative branch is their denial to the executive branch.

The prime reason for the concern of the founders over control of public finances is clearly apparent. When the executive branch has financial independence, when it can command all the funds it desires and for whatever purposes, the almost certain and inevitable result is aggrandizement of power by the executive and attrition of the freedom and liberties of private citizens. When control of public finances is retained by the people, as nearly as may be under the form of government employed, there is a potent deterrent to unwanted expansion of executive power and a staunch safeguard of the freedom and personal liberty of the people.

I should note here that I do not intend to imply that the executive always, or perhaps ever, tries deliberately to expand his power at the expense of the individual citizen. In point of fact, executives - whether called king, emperor, president, or something else - generally take only such actions as they honestly believe to be desirable for the people as a whole. Expansion of their own power at the expense of the individual is not generally their goal as such. But executives in government understandably grow impatient with legislative deliberation and slowness; the executive's impulse is to display strength by acting decisively and quickly. Financial independence permits and encourages that sort of action and thereby contributes, quite aside from the matter of good or bad intentions, to more and more governmental intervention in private affairs and less and less freedom for the people. You may ask how the executive branch can have financial independence. Possession in its own right of the power to levy and collect taxes or the power to issue money, or both, is the answer. Through unchecked tax power the executive arm can take directly whatever share of the national income it wishes. Through uncontrolled money issue it can create new funds and therewith take by purchase whatever part of the national product it wishes. Exercise of the power to tax depresses the real income of the people by diverting to the government the privilege of spending part of their funds. Exercise of authority to issue money cheapens the monetary unit and thereby impairs the power of every individual's funds to command goods and services in the market, and this also amounts to a reduction of real income. Both of these roads to financial independence of the executive are blockaded in our political system by the constitutional provision which lodges the power to tax and the power to issue money in the Congress. This is one aspect of our doctrine of separation of powers.

I mentioned one road to financial independence of the executive as the power to issue money. At this point it is tremendously important to recognize that in this country money is created without actually issuing currency or coin. This fact is not widely enough understood. Money can be, and in this country usually is, created through expansion of bank credit. And this bank deposit money, which circulates in the form of checks, is just as much money as is currency. Indeed bank deposits constitute the great bulk of our money supply, and an overexpansion of checkbook money may cause the value of the money unit to fall just as surely as would an overissue of currency.

Against this roughly sketched background we are prepared to begin an examination of the Federal Reserve System. We have seen that the Congress possesses the power to tax. That power it can and does exercise directly. By direct legislative methods the Congress can also control the issue of currency and coin. It took us a fairly long time to learn, however, that Congressional control of these functions was not enough and that some sort of mechanism was needed to regulate the creation and extinguishment of checkbook money - in other words, bank deposits. Our central banking institution - we call it the Federal Reserve System - was designed by the Congress nearly 40 years ago to fill that need. It is the system's special responsibility to regulate the volume of money and credit.

The Federal Reserve System is a typically American institution, and as a result differs in many respects from most central banks elsewhere in the world. In a broad sense, the System has certain traditional powers, purposes and functions common to most central banks, but its framework and organization are peculiar to the United States and to our political system.

The Federal Reserve System was established for public purposes and it is therefore publicly accountable for its performance. Its responsibility runs directly to the Congress, the duly elected representatives of the people. The Congress wrote into the Federal Reserve Act, the System's organic law, a measure of independence for the central banking institution, thus recognizing and carrying out our traditional doctrine of separation of powers. The practical men of the Congress recognized that the formulation of monetary and credit policies, if they are to fulfill their purposes, must be kept flexible and responsive to continuously changing conditions, even to the point of trying to foresee changes. The lawmakers recognized the necessity to preserve continuity and unity in these policies, and the imperative need to maintain nonpartisan objectivity in their determination. They did not wish to have our central bank subject or responsive to the day-by-day pressures of party politics. As a result, they tried to make the Federal Reserve System independent in the sense of being nonpartisan and free to make appropriate decisions as to national monetary and credit policy in the light of objective considerations. Policy so independently derived is subject to review and alteration or veto by the Congress, whose creature the Federal Reserve is. Thus it has been aptly said that the independence of the System is "independence within and not from the Government."

That kind of independence is in keeping with the traditional American concept of constitutional government. This concept presupposes certain broad principles definitely prescribed and laid down, followed by enactment into law and translation into reality of forms and procedures which safeguard those broad principles. The legal form and structure of the Federal Reserve System are designed to safeguard the broad principle of independence of which I have spoken. Significant examples are the 14-year terms of the members of the Board of Governors, stock ownership of the Reserve banks by the member banks, and other characteristics of the System which are of course well known to you.

In addition to provisions for the preservation at one time of public responsibility and nonpartisan objectivity, the Congress deliberately built into the Federal Reserve System certain other characteristics in keeping with the kind of country and the kind of democratic system we have. Again let me remind you that these men who conceived and brought forth the Federal Reserve System were practical men. They recognized that in order to insure objectivity in policy making it was desirable to guard against erratic and interested judgments. They recognized that wisdom is not geographically concentrated and that this country is great in size and diversified in interests. Consequently they devised a regional central banking organization with countrywide representation of localities, interests and experiences.

The Federal Reserve System is therefore a unique American institution with both national and regional characteristics. The Board of Governors in Washington is composed of seven men nominated by the President and confirmed by the Senate. The 12 regional Reserve Banks (and their 24 branches) are public institutions but are managed by separate and regionally constituted boards of directors and corps of officers. Stock ownership, but not complete control, is vested in the commercial banks which are members of the Federal Reserve System. On the boards of directors of the regional Reserve Banks and their branches and in the official families of the banks and their branches are represented wide and diversified experience and consequently balanced judgment.

The Federal Reserve System is a working institution in which there is a unique American infusion of private ownership with public responsibility. It is a national organization with regional representation. It participates in the formulation of national policy but with due regard for the fact that the nation is a composite of regions. I do not mean to imply that national policy should reflect narrow and selfish sectional interests but rather that such policy should reflect realistic recognition of the fact of regional differences so as to make policy serve most fully the purpose for which it is designed, namely the true national interest.

With that we shall terminate the brief excursion into what I have called political philosophy. The points I have tried to make are fundamental, and I hope they will be kept in mind as the discussion is continued. Next on the agenda is consideration of a basic power of the Federal Reserve System.

An important basis of the power of the central bank is its power to issue currency. As you all know, Federal Reserve notes are the main component of the nation's currency supply. This issue power, except for the Treasury's authority to issue silver certificates, is vested exclusively in the Federal Reserve banks, no commercial bank has it. It is conferred on the Reserve banks by the Congress, and the Reserve banks act as the agent of the Congress in their exercise of the power.

Emphasis is placed on the authority of the Reserve banks to issue currency for two reasons: (1) the Reserve banks are thus able to supply directly varying amounts of currency to the economy as it requires this type of money; and (2) the Reserve banks are thus able to adjust the commercial banking system's basic reserves which can be expanded some 5 or 6 times in the form of bank deposits under the fractional reserve system. Legally, reserves required of member banks must take the form of credit on the books of the Reserve banks; the Federal Reserve notes in the tills of the member banks may not now be counted as part of these required reserves. But it is merely a historic accident that this is so. (In an effort to husband the gold supply of this nation during the time of World War 1, a law was passed making gold held by member banks ineligible to help meet their required reserves, thereby forcing the member banks to turn in much of their gold for credit at their Reserve banks. After the war no change was made, and none has been made to this time, allowing lawful money in member banks' tills to apply on reserve requirements.) Actually both Federal Reserve notes outstanding and deposits on the books of the Federal Reserve banks to the credit of member banks are liabilities of the Reserve banks and constitute merely two aspects of the same thing, namely, Federal Reserve credit, or, to put it another way, merely the results in two forms of the same power: the power to issue currency.

The law might just as well read that reserves required of member banks must consist of liabilities of the Reserve banks either in the form of Federal Reserve notes outstanding or deposit credit. The two are interchangeable insofar as the Reserve banks are concerned. When the public wants more currency in circulation (as it does in certain seasons of the year) member banks exchange their deposit credit for notes; when member banks have excess amounts of Federal Reserve notes on hand, they exchange the notes for deposit credit. Fundamentally and practically it is the Reserve System's power to issue and retire currency that controls the level of bank deposits.

Look at it this way. The authority of the Reserve banks to issue currency helps explain the existence of checkbook money. Why are people willing to keep assets in the form of bank credit - in other words, bank deposits - rather than currency? There are easily apparent conveniences in the use of checkbook money, of course, but the willingness of people to accept and keep it arises in the last analysis out of confidence in their ability to exchange their bank deposits, if need be, for what is sometimes called folding money. So long as one is confident that he can write a check against his deposit balance and get currency for it, there is little or no incentive to do it except for convenience in small transactions.

In the Federal Reserve System's virtually exclusively possession of the note issue privilege, in the fact that these notes form the effective base for a fractional reserve commercial-bank-deposit structure, and in the range of required reserve percentages which determine the potential expansion of deposits over the reserve base, in these three things we find the keys to the ability of the Federal Reserve System to influence the rate of expansion or contraction of bank credit. By feeding reserves into the commercial banking system, the expansion of bank credit is made possible and, under ordinary circumstances, encouraged. Withdrawing reserves from the commercial banking system discourages expansion of bank credit and may result in its contraction.

The deposit balances of the member banks on the books of the Reserve banks consist of (1) required reserves - i.e., those which are required by law to be kept there under the fractional reserve system - and (2) excess reserves, which may be loaned or invested. Thus the ability of the commercial banking system to expand bank credit as of any given time may be measured by the volume of its excess reserves, and the effectiveness of the Federal Reserve System in influencing the expansion and contraction of bank credit depends upon its ability to vary and change the supply, cost and availability of these reserves. We must now consider how this can be accomplished.

The Federal Reserve System has three methods of influencing the supply, cost and availability of bank reserves, namely: (1) varying the ratios of the fractional required reserves of member banks; (2) operation of the discount function, which may affect both the volume of reserves made available to borrowing member banks and the cost thereof; and (3) open market operations, i.e. purchases and sales by the Reserve banks in the open market of investment assets. Before proceeding to a discussion of these implements of monetary and credit policy, it will be appropriate and beneficial, I think, to consider some elementary matters of mechanics.

Visualize, if you will, a very simple balance sheet for the Federal Reserve System with two asset accounts and two liability accounts. On the assets side these items are shown:

Gold certificates	$22	billion
Loans and investments	23	"
TOTAL	$45	"

On the liabilities side:

Federal Reserve notes	$24	billion
Deposits (mainly member bank reserves)	21	"
TOTAL	$45	"

There are other miscellaneous asset and liability items, of course, but we can disregard them here for simplicity's sake.

By law, the Federal Reserve banks are themselves subject to legal reserve requirements. They have to maintain 25 per cent reserves in gold certificates against their note and deposit liabilities. Thus the Reserve banks must have $6 billion in gold against $24 billion in Federal Reserve notes outstanding, and $5 billion plus in gold against $21 billion in deposits held or a total of $11 billion plus in gold. As of now, the 12 Reserve banks have in the aggregate roughly twice as much gold as is required against outstanding notes and deposits.

Now, I want to digress for a moment to talk about a widespread misconception of the central banking institution - a misconception of the way a Federal Reserve bank operates. Many people, including many bankers, fall into the error of believing - and some of them go about saying - that the ability of a Federal Reserve bank to make loans and investments, i.e., to operate the discount function and to conduct open market operations, is based upon and made possible by its deposits, especially the reserve accounts of its member banks. Let us refer again to the simplified balance sheet and examine that erroneous conception.

Let us suppose first that $21 billion of member bank deposits shown on the balance sheet were withdrawn. (Actually this would not happen because part of these deposits consists of required reserves under the law.) The withdrawals would be met - would have to be met - by issuing an equivalent amount of Federal Reserve notes. This would change the liability side of the balance sheet by deleting the deposit item of $21 billion and increasing the note item to $45 billion. Simply a transfer from one liability item to another. The gold reserve ratio would remain unchanged, and since the gold ratio is the effective legal control over the amount of the Reserve banks' loans and investments, it follows that the withdrawal of the deposits in toto would not affect the Reserve bank's ability to lend and invest. Further loans or investments could be disbursed or paid for either by issuing more notes or by establishing new deposit balances, customarily the latter. Thus it should be abundantly clear that loans and investments by a Reserve bank create deposits, and not vice versa.

People who believe that the Reserve bank's ability to lend and invest depends on its deposits simply fail to remember or to understand that the Reserve bank is a bank of issue - it possesses the power and authority to issue currency. It is to be sharply distinguished from commercial banks for this reason. It does not have to meet deposit withdrawals by sale of assets.

Let us now analyze an example employing one of the three methods which the Federal Reserve System may employ to adjust bank reserves. Hypothesize - instead of an unrealistic withdrawal of member bank reserve balances, as we did a moment ago - a deliberate desire on the part of the Federal Reserve to encourage the expansion of bank credit. In this case the Federal Reserve takes the initiative and decides, shall we say, to make additional reserves available to the commercial banking system through purchases by the Federal Reserve banks in the open market of Government securities. This presupposes offers to purchase at such prices as will attract sellers. Suppose these purchases amount to $5 billion. We must reflect the transactions in our streamlined balance sheet. On the assets side the loan and investment item is increased to $28 billion. Gold remains unchanged. On the liabilities side, payment for the securities purchased is reflected in the addition of $5 billion to either notes or deposits, or some combination of the two. Gold is still more than 25 per cent of total notes and deposits as so increased. (In fact, with $22 billion of gold the System's total of notes and deposits could be expanded to $88 billion.)

Take the converse of the foregoing hypothesis and suppose that the Federal Reserve decides as a matter of credit policy to restrict the availability of reserves to the commercial banking system in order to discourage, or slacken, or even stop the expansion of bank credit. Again employing open market operations, the Federal Open Market Committee causes the Reserve banks to sell securities. This presupposes, of course, the offering of these securities at such prices (yields) as will attract buyers. On the assets side of our balance sheet, these sale transactions are reflected in reductions of loans and investments, while gold remains unchanged. On the liabilities side, payment to the Reserve banks for the securities they sold will be reflected in reduction of either notes outstanding or deposits, or some combination of the two.

Now suppose we carry the balance sheet exposition a bit further and reflect the foregoing transactions in the consolidated balance sheet of the commercial banking system (all commercial banks). On the assets side we take 2 items:

Cash assets (reserves)	$ 40	billion
Loans and investments	155	"
TOTAL	$195	"

On the liabilities side:

Deposits	$180	billion
Capital accounts	15	"
TOTAL	$195	"

For present purposes other balance sheet items can be, and are, disregarded. Suppose again that the Federal Reserve System, desiring to encourage expansion of bank credit, purchases $5 billion of securities in the open market. If purchased from commercial banks, only items on the assets side of the foregoing balance sheet are immediately affected, namely, loans and investments are reduced $5 billion and cash assets increased in the same amount. If such purchases are made from nonbank sources, i.e., from customers of banks, the following changes occur in both sides of the balance sheet: cash assets and deposits are both increased $5 billion. In each case cash assets (reserves) are expanded. If the Federal Reserve sells, instead of buying $5 billion of securities, the result would be to diminish reserves of the commercial banking system. If sold to banks, cash assets would go down and investments up $5 billion. If sold to nonbank purchasers, cash assets and deposits would both decline $5 billion. In either case cash assets (reserves) go down. Thus the processes of paying for Federal Reserve purchases and sales in the open market inevitably expand or contract, as the case may be, the reserves of the commercial banking system and thereby affect the bank credit expansion potential of that system.

I repeat that the ability of the Reserve banks to conduct the transactions just described is based in the last analysis upon their possession of the power to issue currency. This is an inherent power of government, which in this country is constitutionally delegated to the legislative branch and in turn has been delegated by the Congress to the Federal Reserve. And here I emphasize that such delegation is essential to discharge by the Federal Reserve of its dominant and all-pervading responsibility, as agent of the Congress, to utilize its powers for the purpose of regulating the supply, cost and availability of bank reserves.

Without stopping to make similarly detailed analyses, suffice it to say in passing that the Federal Reserve discount function also can be, and is, used under appropriate circumstances to influence the supply, cost and availability of bank reserves and with effects on such reserves and on the Federal Reserve balance sheet similar to those resulting from open market operations. Important differences between these two instruments of monetary policy are to be noted in (1) the fact that as to discounting or borrowing the initiative lies generally with the member banks and not the Reserve banks (this is especially true when credit policy is operating on the side of monetary ease), and (2) changes in the discount rate may be employed by the Federal Reserve, and are instantly construed by the market, as signals of shifts or trends in credit policy, one way or the cther, thus bringing to bear a more or less potent psychological influence on the market. The power to vary and change the ratios of legal or required reserves is a powerful instrument of monetary policy whose usefulness in certain circumstances can scarcely be questioned. However it has been aptly described as a blunt tool whose use "should be reserved for rare occasions when major readjustments in the banking structure are necessary."

I have spent time for a reason in attempting to illuminate some of the aspects of Federal Reserve banking which distinguish it from commercial banking. Much of the failure to understand the role and functions of the Federal Reserve System is directly attributable to an attempt to think of the Reserve banks in terms of commercial banks. This leads to failure to understand that whereas the mainspring of commercial banking is (and rightly so) the profit motive operating under competitive conditions, the mainspring objective of the Federal Reserve System is to influence the country's money supply by operating on and through commercial bank reserves. To be sure, the Reserve banks have earnings which, as the report of the Patman Subcommittee says, "are derived from the exercise, under exclusive privilege granted by Congress, of public functions (including the issuance of money) of an intrinsically lucrative nature." The Congress has provided that the member banks owning the shares of Reserve bank stock shall receive 6 per cent dividends and no more. After payment of expenses and such dividends the System regularly pays 90 per cent of the earnings of the Reserve banks into the Treasury of the United States. Thus profit is not the mainspring of Federal Reserve policy and action; rather the motive and indeed the statutory obligation are to serve the public interest through provision of an appropriate money supply.

At this late stage in an already lenghty discourse, the time has come to view as a whole the role of the Federal Reserve System in our national economy in the light of its objectives, responsibilities, powers and operative procedures. Having inquired to such extent as time permits into the central aim of the System and "how the thing works", we should be able to test the credibility of my earlier assertion that the Federal Reserve is a typically American institution in keeping with the American political system.

Let me repeat a widely-accepted statement of System purposes and functions: It is the function of the Federal Reserve System to regulate the volume, cost and availability of bank credit so that money and credit will contribute as much as money and credit can to full use of this nation's human and material resources, to stable values, and to a rising standard of living.

The Federal Reserve System influences the money supply through adjustments of bank reserves. It does not exercise a pin-point, direct type of control over our economic behavior. The System does not choose between the many applicants for credit, selecting those creditworthy from those not creditworthy and picking from among the creditworthy those who will return the greatest production. Such selection is one of the principal functions of our more than 14,000 commercial banks. And they are doing a good job.

The System deals primarily with general credit controls, which work impersonally through the financial mechanism to bring pressure or to relieve pressure on all member banks and thereby on customers of banks. Its influence is on the over-all supply of funds; other institutions and economic forces determine who shall and who shall not have access to these funds. The impersonal regulation of economic behavior that characterizes the System's operations is in step with traditional American preferences for fair play in the incidence of Governmental regulation. Let the Government fix the "rules of the game", and let those rules apply to all.

Note my statement, "so that money and credit contribute as much as money and credit can..." It goes almost without saying that monetary and credit adjustments cannot alone provide stability and growth for our economy. Among other things, a proper fiscal policy and an economic climate conducive to new enterprise are also needed. We have learned many things in the nearly forty years of operation of our central bank. For example, we have long since given up the notion, which permeated the thinking of students of banking and the thinking of Congress at the time of the passage of the Federal Reserve Act in 1913, that the volume of money and credit could be adjusted almost automatically and that stability of prices would result from such automatic adjustment. Instead it is generally agreed today that there is little that is "automatic" in the adjustment of money and credit to their appropriate level. Central bankers must almost always be consciously and deliberately "leaning against the breeze" - a posture in which it is sometimes difficult to win friends. We have learned that any reasonable increase in the cost of credit will not alone prevent speculative use of credit, that adjustments in the volume, cost, and availability of reserves, and thus bank credit, work best if made early in the correction of either inflation or deflation, and so on. But of the many things we have learned, I should say the foremost is the fact that adjustments in the money and credit fields will not do the job alone.

In fact our unique central bank wants no truck with an economic system that expects the central bank to control the economic behavior of each individual and each business institution with push-button planning and minute direction of the use of credit. That kind of central banking is practiced today by the Gosbank of Soviet Russia. But in this country, thank goodness, we prefer generally to limit central banking to the use of broad, general credit controls, and thus we accept whatever limitation is inherent in the contribution which money and credit can make toward the achievement of our objectives: full use of our human and material resources, stable values and a rising standard of living. We accept those limitations because, important as our objectives are, the preservation of human freedom and individual liberty is even more important. That is the essence of the case for general monetary and credit policy against direct controls, foregoing any discussion of the efficiency and efficacy of direct controls vis-a-vis the democratic processes of the market.

If, then, you agree with me that the Federal Reserve System is a typical American institution in keeping with the American political system, permit me to conclude this discourse by pointing out certain inescapable difficulties under which we must conduct monetary operations. These difficulties are not so great that all monetary action is useless, but they must be lived with in central banking under any system of free enterprise where individual initiative and choice exist - in central banking under any system except the completely controlled economy of a totalitarian state.

First, our basic data are always behind time. The lag varies from several hours in the case of prices and yields determined on highly-organized markets, to several months for the aggregative measurements of over-all economic activity such as the level of National Income or the Gross National Product. Next, there is the difficulty of properly forecasting future behavior on the basis of this inadequate data. Unanimity of opinion with reference to the outlook for prices, production, and employment almost never exists, since this "outlooking" is necessarily a matter of judgment, a matter of the weight given to certain elements in the situation. Further, the uncertainty of the response to a given monetary operation must be recognized. For example, the result of a decrease in required reserve percentages today might well be unlike the result of an equal decrease at another time.

Finally, each problem appears in a different setting. Inflation and deflation are not new. Far from it. But institutional backgrounds change. Inflation may stem from too much tobacco money as it did once in Colonial times, or from over-issuance of bank notes in another era, from over-issuance of Greenbacks in still another, or from excessive creation of bank credit and deposits as it does today. Tomorrow it may take another form - possibly even a tendency to use liquid savings instruments (near-moneys) as media of exchange without prior exchange into bank money. And to make each setting still more variable, individual responses to changes in economic stimuli vary. We know comparatively little in terms of precise measurements of consumer reaction to change, although progress is being made in establishing these norms. Central banking in a democracy is something less than a science; monetary actions are not always perfectly timed.

But let me hasten to add, before these comments on the difficulties surrounding monetary actions suggest to you that the problems are insoluble, that there are certain basic principles of action and certain fairly consistent norms of human response which taken together form a large area of positive central bank action in most situations. For example, few will disagree that an expanding supply of money and credit is a self-reenforcing influence on rising prices (inflation) and that a contracting supply is a self-reenforcing influence in deflation.

So to sum up these thoughts on the place of the Federal Reserve System in our national economy, I should like to re-emphasize three points.

1.) We have a central bank designed, wisely, by the framers of the Federal Reserve Act to continue the lodgment of the power over the public purse with the Congress (not the Executive) and designed to give the System a measure of independence within Government, that is, a measure of independence from the day-to-day political pressure for this or that.

2.) The basis of the central bank's control over the volume of money and credit rests on the power of note issue. This power is the basis of the System's ability to adjust member banks' reserves through the purchase and sale of Government securities in the open market and through conduct of discount operations.

3.) The purpose and function of this unique, typically American institution is to give this nation the best money tool that human ingenuity can devise, and to do that by the use of general monetary and credit policies rather than direct controls involving "intervention in particular markets."

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