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82D CONGRESS 2d Session | SENATE | DOCUMENT No. 123, PT. 1

MONETARY POLICY AND THE MANAGEMENT OF THE PUBLIC DEBT

THEIR ROLE IN ACHIEVING PRICE STABILITY AND HIGH-LEVEL EMPLOYMENT

REPLIES TO QUESTIONS AND OTHER MATERIAL FOR THE USE OF THE SUBCOMMITTEE ON GENERAL CREDIT CONTROL AND DEBT MANAGEMENT

PART 1

JOINT COMMITTEE ON THE ECONOMIC REPORT

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JOINT COMMITTEE ON THE ECONOMIC REPORT

UNITED STATES
GOVERNMENT PRINTING OFFICE
98454 WASHINGTON : 1952

JOINT COMMITTEE ON THE ECONOMIC REPORT

(Created pursuant to sec. 5 (a) of Public Law 304, 79th Cong.)

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HENRY C. MURPHY, *Economist to the Subcommittee*

SENATE RESOLUTION NO. 290

(Submitted by Mr. O'Mahoney)

IN THE SENATE OF THE UNITED STATES

APRIL 23 (legislative day, APRIL 14), 1952

Resolved, That the Joint Committee print entitled "Monetary Policy and Management of the Public Debt," compiled for the use of the Joint Committee on the Economic Report, be printed with illustrations, as a Senate document; and that six hundred additional copies shall be printed for the use of the said Joint Committee.

Attest:

LESLIE L. BIFFLE, *Secretary*.

LETTER OF TRANSMITTAL

FEBRUARY 20, 1952.

Hon. JOSEPH C. O'MAHONEY,
Chairman, Joint Committee on the Economic Report,
United States Senate, Washington, D. C.

DEAR SENATOR O'MAHONEY: There is transmitted herewith a staff document in two volumes, entitled *Monetary Policy and the Management of the Public Debt; Their Role in Achieving Price Stability and High-Level Employment*, containing the replies of Government officials, bankers, economists and others to the questions asked of them by the Subcommittee and included in the pamphlet *Questions on General Credit Control and Debt Management*, released last October. The document also contains certain other material submitted to the Subcommittee and judged by the staff to be useful in rounding out that included in the answers.

The publication of this material before the opening of public hearings will be helpful in a number of ways. First, it will make available to the Committee in usable form a large amount of information on these subjects; second, it will point up the issues of the inquiry and stimulate intelligent public discussion; third, it will permit all witnesses before the Subcommittee to study the points of view of others in the course of preparing their own statements; and, fourth, it will permit those witnesses who have already submitted answers to written questions to greatly shorten their testimony.

The materials presented here do not necessarily represent the views of the Subcommittee, of its individual members, or of its staff.

Sincerely,

WRIGHT PATMAN,
Chairman, Subcommittee on General Credit Control and Debt Management.

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Part 2 contains the replies by—
- Federal Reserve Bank Presidents.
- The Council of Economic Advisers.
- The Comptroller of the Currency.
- The Chairman of the Federal Deposit Insurance Corporation.
- The Administrator of the Reconstruction Finance Corporation.
- State Bank Supervisors.
- Economists.
- Bankers.
- Life Insurance Company Executives.
- United States Government Security Dealers.
- Statement by Conference of University Economists sponsored by the National Planning Association.

An index to both volumes will be found at the end of part 2.

FOREWORD

Shortly after Senator O'Mahoney appointed this subcommittee last spring, I made a statement announcing a preliminary program for the subcommittee's inquiry in which I said in part:

I hope that members will submit to me their suggestions if they have additional points which they think should be explored, but I suggest that the subcommittee concentrate its inquiry on the following points.

1. Economic expansion and controlling inflation

Today, and for the indefinite future, we are faced with a struggle to preserve free democratic institutions. The vital element in winning this struggle is economic strength. Economic strength calls for increased production and the maximum use of the Nation's human and material resources. Economic policies and programs—both public and private—must be geared to an expanding economy.

An important element making for economic strength is maintenance of the value of the dollar, by the avoidance of inflation. Inflation is, however, an inherent threat when, as now, it is necessary to divert substantial resources for defense or war purposes. Under present conditions, inflation can only be avoided by vigorous measures to restrain consumption and other nondefense expenditures, and by equally vigorous measures to break the bottlenecks which impede increased production and economic expansion.

The Government's current monetary and credit policies must be evaluated not only in terms of their success in curbing the expanding demands of individuals, businesses, and governments to the limits of available supplies, as may have been justified in the inflation period immediately following World War II, but must also be measured by their effectiveness in facilitating the over-all expansion of production, particularly in the critical defense and defense-related areas of our economy.

The subcommittee should investigate the compatibility of economic expansion on the one hand, and programs of general credit expansion on the other.

2. Changes in interest rates and their effects on economic expansion and inflation

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 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 or cost of carrying the national debt, such facts would be arguments for allowing Government obligations to find their level in the open market.

The subcommittee should investigate the effectiveness of changes in interest rates in determining the volume of credit in the face of strong inflationary pressures.

3. Special reserve devices

If it were to be found that general restrictions on credit expansion in the private area were effective in avoiding inflation, and would not interfere with needed production and expansion, but that costs of higher interest rates on the public debt would be too burdensome and the administration of the debt generally too complicated and dangerous, a partial remedy might lie in granting additional authority to the Federal Reserve System with respect to commercial bank reserves. A measure of this nature might be devised and administered in such a way as to maintain a substantial portion of the market for Government securities at low interest rates and at the same time provide the needed restraints upon private credit expansion at commercial banks. Proposals of this kind have been offered from time to time by monetary technicians. One type of special reserve was advanced by the Board of Governors of the Federal Reserve System in 1947. In this connection experience in other countries in applying devices of this sort is of interest.

The subcommittee should study the desirability of further devices by which monetary authorities might restrict general credit availability, while protecting the Government bond market, particularly the imposition of additional or special reserve requirements upon commercial banks.

4. Credit rationing other than by interest rates

A variable rate of interest, conceived of as the price paid for capital or credit, is one method of allocating available credit among competing users. As an alternative, more direct controls might be established for rationing or allocation of credit directly upon the basis of national need. There is the possibility also of extending the so-called selective controls so that larger areas of the entire credit structure would be brought under "selective" controls.

The subcommittee should study the desirability of broadening the area of selective controls and the possibilities of establishing standards for the direct rationing of credit.

5. New debt instruments

In light of the size of the national debt with substantial refunding obligations facing the Treasury in the next few years, and in light of the likelihood of having to increase the public debt as a result of defense activities, serious consideration should be given to the adequacy of the various types of debt instruments now used by the Federal Government. The confidence of the public in the debt obligations of the Government takes on added significance as the international situation becomes more serious. Prospective holders of Government securities fear a further decline in the value of the dollar as well as a possible decline in the market value of the Government securities which they hold. But we must recognize that huge accumulations of liquid funds in the hands of individuals, business, State and local governments, unless sterilized * * * will inevitably result in substantial inflation. Some have suggested a purchasing power bond. On balance we believe such an instrument would be unwise, but other possibilities include refunding savings bonds which have been held to maturity at higher rates of interest. Particularly worthy of consideration is a wider use of nonmarketable securities with provisions specifically tailored to meet the needs of various investor classes, such as the new 2¾ percent refunding bond.

The subcommittee should study the feasibility and need for new types of public debt instruments to assure maximum use of this device in encouraging individuals, businesses, and State and local governments to hold present savings and to increase their savings.

6. Federal Reserve—Treasury relations

The relations of the Federal Reserve System to the executive branch of the Federal Government have undergone great changes in the four decades since the Reserve System was established. Some of these have been the result of statutory changes; others have resulted from such institutional changes as the abandonment of the gold standard, the rise of the public debt, and the needs of war finance. The traditional American view has assigned and continues to assign importance to the independence of the Federal Reserve System from responsibility to the executive department of the Federal Government. It has often been pointed out, however, that this independence makes it possible for the Federal Reserve to follow policies in conflict with those of the Government's economic program. Recently the Federal Reserve and the Treasury announced that they had reached "full accord with respect to debt management and monetary policies to be pursued in furthering this common purpose to assure the successful financing of the Government's requirements, and, at the same time, to minimize monetization of the public debt."

The subcommittee should include in its study the question whether steps should be taken to increase the responsibility of the Federal Reserve System to the executive department and what degree of autonomy is desirable under present-day conditions.

Since that time, and following two meetings for discussion of procedure and the nature of the issues involved, the subcommittee has addressed written lists of questions to the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, the Chairman and Vice Chairman of the Federal Open Market Committee to be answered jointly (the Chairman and Vice Chairman of the Open Market Committee are also the Chairman of the Board of Governors and the President of the Federal Reserve Bank of New York, respectively), the presidents of the Federal Reserve banks, the Council of Economic Advisers, the Comptroller of the Currency, the Chairman of the Federal Deposit Insurance Corporation, the Administrator of the Reconstruction Finance Corporation, the 48 State bank supervisors, and a selected list of economists, bankers, life insurance company executives, and United States Government security dealers.

The purpose of these questions is to bring into focus the issues before the subcommittee and to give the members of the subcommittee, prospective witnesses at its hearings, and the public generally an opportunity to study the views of various parties in interest. As many of the persons to whom the questions were addressed will also be witnesses before the subcommittee, the questions will serve in their case the dual purpose of allowing them to shorten their formal statements by relying upon the material already submitted and to direct their testimony largely to the points of difference between respondents as brought out by the answers to the questions. The value of this procedure, both in compressing the necessary length of hearings and in giving them a greater depth and significance, was clearly demonstrated by the experience of the Subcommittee on Monetary, Credit, and Fiscal Policies under the chairmanship of Senator Douglas.

In the foreword to the pamphlet containing the questions, I said in part:

During the fall of 1949 a subcommittee of the Joint Committee on the Economic Report conducted an extensive inquiry into fiscal and monetary policy. At that time the country was recovering from a mild recession and the scales seemed evenly balanced between inflationary and deflationary pressures. Korea was a little-known spot on the map of Asia.

The 2 years which have passed since that time have been packed with events. The international situation has deteriorated markedly, and the United States

Government has embarked on a vast program of military preparedness with its inevitable corollary of increased inflationary pressure.

There has been little disagreement, at least in principle, on the proper measures of fiscal policy called for by the new situation, and the full committee, in a report issued on August 15 of this year [1951], said:

"The committee is * * * convinced of the urgent need (1) for renewed efforts to reduce and postpone less essential Government expenditures, and (2) for promptly providing tax revenues sufficient to balance a carefully planned administrative budget this fiscal year."

There has been much disagreement, however, both inside and outside the Government, with respect to the proper steps to be taken in the present emergency in the fields of credit policy and debt management; and, notwithstanding the "accord" announced by the Treasury and the Federal Reserve System in March of this year, much of the course to be followed remains to be charted. The policy disputes of the past year have also brought into sharp focus the question of whether our machinery for the determination of monetary policy—set up, for the most part, many years ago—is appropriate to cope with the problems of the present day and to carry into effect the policy of the Congress with respect to economic stability as set forth in the Employment Act of 1946. As Chairman Martin of the Board of Governors of the Federal Reserve System recently said to the American Bankers Association:

"Our present central bank in now nearly 39 years old, and the time has come, it seems to me, when we must reevaluate, reassess, and redetermine its worth and effectiveness."

It was as an initial step in this direction that the committee staff, at the suggestion of Senator Flanders and myself, made a prelimnary study of these problems which was published as a committee print under the title "General Credit Control, Debt Management, and Economic Mobilization" earlier this year * * *.

The questions were different for each class of respondent, depending on their different interests and the special sources of information available to them. The questions addressed to persons outside of the Federal Government were few in number and were designed to require as little research as possible in order to conserve the time of the respondents and encourage a better response. In the case of Federal Government officials, on the other hand, the subcommittee felt freer to ask questions requiring more work in the preparation of answers but of great value in furnishing a background for the inquiry and for the study of monetary policy generally.

The answers of Federal Government officials are reproduced in full in the material here published. They show in almost every case the results of much research and careful thought on the part of the agencies. I should like to take this occasion to thank the heads of the agencies concerned and the members of their staffs who have gone to such pains, often working long hours of overtime, to produce a record which will be of value for years to come and of which both they and the subcommittee can be proud.

The response from persons outside the Federal Government has been exceedingly good both in the number of replies and in the care with which the answers have been prepared. Replies were received from about one-third of the some 1,200 persons outside of the Federal Government to whom the questionnaires were sent—an exceptionally high response for an inquiry conducted entirely on a voluntary basis and requiring considerable time and attention on the part of the respondents. All replies were carefully read by the committee staff. A separate chapter is devoted to the replies of each group of respondents. These chapters contain brief summaries (prepared by the committee staff) of the answers to each question, followed by extensive extracts from the actual replies. The summaries and extracts reflect as nearly as possible the letter and spirit of the replies and their degree of agreement and diversity. They are necessarily more lengthy in the case of economists, whose business it is to discuss, than in the case of bankers, whose business it is to decide. The complete list of questions for each class of respondent is repeated for convenient reference in an appendix at the end of each chapter.

Lists of the persons replying and their affiliations, and data on the number of inquiries and responses are included in the appendixes to each of the chapters containing the replies from non-Federal respondents. In this connection I should like to thank all of those replying and also the National Association of Supervisors of State Banks, the American Bankers Association, the Reserve City Bankers Association, the Life Insurance Association of America, and the American Life Convention for their cooperation with the committee staff in various technical phases of the work. Special thanks are due to Dr. James J. O'Leary, director of investment research of the Life Insurance Association of America, for his work in preparing the summaries and extracts of the answers of life insurance company executives comprising chapter XII.

In the letter transmitting the subcommittee's questionnaire to persons outside the Federal Government, it was stated that the replies would be held confidential if the respondents so indicated. A relatively small number of persons asked that this be done. Their names have been included among those replying (without special indication that they asked that their replies be held confidential) and their comments have been taken into account in preparing the summaries of the answers to each question. But no identified extracts have been taken from their replies and their content has therefore been held confidential. A few of the persons replying to the questionnaire attached the condition that their replies be printed in full or not at all. Where this condition was attached to answers to particular questions, we have often been able to print the complete reply. When the condition was attached, however, to the replies to the entire list of questions and (in one case) to the letter of transmittal, we have not been able to include any of the replies in our extracts. In all such cases, however, the replies have been taken fully into account in preparing the summaries, and in all cases the complete original letters are available for study by members of the subcommittee.

In preparing the questions the committee staff sought and obtained the advice and counsel of many persons in the relevant fields of activity. The questions for Federal agencies were submitted to them in tentative form during the month of August and many additions and changes in the list were made at their request. The complete list of questions addressed to all respondents was published in a pamphlet dated October 12 and given to the press for release on October 15, 1951. A portion of the foreword to that pamphlet has been quoted earlier in these remarks. A copy of the pamphlet was furnished to each person to whom any of the questions were addressed. Some of the questions addressed to Government agencies have, at the request of the agencies and with the permission of the committee staff, been slightly altered from their form in that pamphlet in order to save unnecessary labor or to improve the smoothness of the presentation of the answers.

No question was included unless its current interest and fundamental significance justified the labor of asking it, the labor of answering it, and the labor of studying the answer. No question of a controversial character was meant to imply a single "right" answer. In such questions, as in all others, it is for the questioner to question and for the answerer to answer. Each of these are preliminary steps necessary to give the subcommittee—and all other students of monetary policy—the information and analyses on which to build sound judgments.

The final chapter of this compendium reprints a statement entitled "Monetary Policy To Combat Inflation." This statement was prepared by a conference of university economists which met October 12–14, 1951, at Princeton, N. J., under the sponsorship of the National Planning Association. The statement was released to the press on January 21, 1952, and is reprinted here for the convenience of members of the subcommittee and of the public generally. It represents the views of the signers only and not necessarily those of either the subcommittee or the National Planning Association.

Each of the issues raised in my statement of last spring is still of great current importance and deserving of the attention of the subcommittee. Each of them is covered in the material here included.

In addition to the points raised earlier, the following important classes of subject matter are covered in the present material (1) the nature and appropriateness of the present congressional directives covering economic policy given to the Federal financial agencies and the Federal Reserve System; (2) the proper relationship of direct controls and of general and selective credit controls under various types of economic conditions; (3) the distribution of authority over credit policy in the Federal Reserve System, particularly between the Board of Governors and the Federal Open Market Committee and the merits and demerits of possible changes in the organization of the Federal Reserve System; (4) the role of open market operations in Federal Reserve policy and the extent to which these operations are personal in character rather than purely impersonal (as visualized in economic textbooks); (5) the advisability of extending Federal deposit insurance to cover all deposits in insured banks; (6) the earnings and expenses of the Federal Reserve System and other financial agencies operating otherwise than on appropriated funds and the degree of congressional control over such earnings and expenses; (7) the adequacy of the present banking structure and the nature of the changes in the banking structure during the past generation; (8) the availability of capital and credit to small business from banking and other sources.

Some of these added materials deal with controversial subjects, while others provide valuable background material necessary for understanding the environment in which monetary policy must operate. Taken as a whole, this compendium constitutes in my judgment by far the best source-book of materials on general credit control and debt management which has been assembled in our generation. It represents many facets of opinion and has been put together in order to present the best-rounded collection of material possible without regard to the emphasis or deemphasis of any particular point of view. The reader should be cautioned, however, that the point of view represented by many of the respondents is that of institutional lenders, while general credit control and debt management affect all classes in the community. Indeed, credit policy and debt management, through their effects on production, profits, prices, and employment, are of major importance to businessmen, farmers, and wage earners—and are an important element in our national security program itself. These other groups in the community are represented indirectly—and the national welfare is represented directly—by the broad interests of the public officials and the academic economists replying to the questionnaires. The representatives of the lending institutions themselves have doubtless also endeavored to express those views which they believe to be in the best interests of the whole community. It would, of course, have been impractical to sample the views of other segments of the community by means of technical questions such as those included in this compendium. It will be one of the major tasks of the subcommittee, however, to fit the views here expressed into that intricate mosaic of interest and opinion which constitutes the whole pattern of American life.

Two main heads or classes of subject matter stand out clearly as focal points in the variety of issues bearing on general credit control and debt management which the subcommittee has to consider. Many of the other questions may be classified directly or indirectly under these two main heads. These two master classifications are (1) the proper machinery for the formulation of monetary policy, and (2) the proper content of monetary policy under present and various hypothetical conditions.

THE MACHINERY FOR THE FORMULATION OF MONETARY POLICY

It is universally agreed that the Congress, the executive branch of the Federal Government, and the private business community must have a share, or at least must be heard, in the formulation of monetary policy. To these three groups some would add farmers and labor. Monetary policy is one of the major determinants of prices and of the total volume of employment—and farmers and labor are at least as directly concerned with these things as any other class in the community.

It is generally, but not universally, agreed that Congress should have the last word in the formulation of monetary policy—authority being delegated to other groups only to the (necessarily large) extent which is required to assure adequate flexibility in the execution of a fundamentally consistent policy throughout the ups and downs of economic conditions and throughout the varying occupational groups and geographical regions of the United States.

Monetary policy, as I have just said, is one of the fundamental determinants of prices, production, and employment. At one time it was felt that the setting of this determinant should be left to the working of the international gold standard and that the rules of this standard were so mechanical and so precise that they would provide an adequate guide to a monetary authority acting independently of the Government. Many persons have now abandoned this view as an illusion even when it was generally held. Most others have recognized that such basis as it may have had, has been swept away by the economic changes of the past generation. As a consequence it is now generally (but not universally) agreed that the formulation of monetary policy must involve *discretion*. Its ultimate formulation has, therefore, become an important element of sovereignty and, in the case of the Federal Government, rests ultimately with Congress.

Congress, however, is not organized in such a manner that it can effectively manage monetary policy from day to day or even from year to year. If it were, then, by the same token, it would not be well organized to perform its fundamental deliberative tasks under the Constitution. Congress must, therefore, rely heavily upon agents to carry out its underlying wishes.

The general agent named in the Constitution to enforce the laws and carry out the wishes of Congress is the President and, under him, the executive branch of the Government. The Federal Reserve System—the most important executor of monetary policy—is a mixed organization. The members of its Board of Governors are appointed by the President with the advice and consent of the Senate, and the Chairman of the Board is designated by the President. However, the members of the Board during their terms of office have, in general, recognized no responsibility except to Congress in the performance of the majority of their functions. Two-thirds of the membership of the board of directors of each Federal Reserve bank is elected by its member banks and one-third is appointed by the Board of Governors. The president of each Federal Reserve bank is elected by its board of directors, but his election must be approved by the Board of Governors. The regional organization of the Federal Reserve System, reaching as it does deep into the business community, provides an invaluable liaison between business and Government. The System has performed an indispensable service in helping business to understand the point of view of Government, and helping Government to understand the point of view of business. It is, in my opinion, of the utmost importance to insure the continuation of the participation of business and agriculture (and possibly labor) in the formulation of monetary policy, while at the same time insuring that the fundamental decisions which affect the welfare of every person in the country and so are of the essence of sovereignty should be made by Federal officials and, ultimately, by Congress.

THE APPROPRIATE CONTENT OF MONETARY POLICY

The controversy which preceded the announcement of a "full accord" between the Treasury and the Federal Reserve System centered around the efficacy of credit policies resulting in small increases in interest rates as means of combating inflation. Both short- and long-term interest rates had increased during the year preceding the full accord; since that time (March 4, 1951) the increase in long-term rates has been given wider amplitude as a result of the abandonment of the policy of supporting long-term Government obligations at par. The effects on inflationary pressures of the policies resulting in these increases have been the subject of intensive discussion, much of which is reflected in this compendium. As is so often the case in the real world, the results of this discussion have so far been inconclusive. It will be one of the major tasks of the subcommittee to sift this matter further and come to such conclusions as it believes appropriate with respect to the extent to which a general tightening of credit can and should be used as an instrument in combating inflation under present and other conditions. Furthermore, inasmuch as the effective application of general credit controls may depend, at least in part, on the adoption of measures to cushion some areas of the economy—and particularly the public credit—from its full impact, this sifting must inevitably include some consideration of measures (such as the various special reserve devices) which have been proposed for this purpose.

Finally, the role of general credit control can scarcely be evaluated except in relation to that of its equally general partner, fiscal policy. And the role of both general credit control and fiscal policy must, in turn, be evaluated in the light of their more partial alternatives and supplements—principally selective credit controls and so-called direct controls, such as those over prices and wages. The advantages and disadvantages of each of these, under present conditions and under the conditions with which we may be faced in the future, must be assessed if the subcomitte is to reach a useful conclusion concerning the role, if any, which each of them ought to play in combating inflation and maintaining a high level of employment under present and other conditions.

The subject matter before the subcommittee is, therefore, immense. The subcomittee's approach must be selective, examining most closely such areas of the field as, in its opinion, require immediate attention. Only one result of its deliberations can be confidently predicted: that is, that the fundamental issues involved will be found vastly too complex to permit of facile generalization.

WRIGHT PATMAN,
Chairman, Subcommittee on General Credit Control and Debt Management.

CHAPTER I

REPLY BY JOHN W. SNYDER, SECRETARY OF THE TREASURY

Letter of Transmittal

February 12, 1952.

Hon. Wright Patman,
Chairman, Subcommittee on General Credit Control and Debt Management,
Joint Committee on the Economic Report,
Congress of the United States, Washington, D. C.

My Dear Mr. Chairman: The work has now been completed on the answers to the questions which you, as Chairman of the Subcommittee on General Credit Control and Debt Management, submitted to me on October 12, 1951.

It seems to me that the inquiry which your Subcommittee is conducting will make an important contribution in the field to which it is addressed. I have given a great deal of time and thought to the answers which I have submitted to the questions and have tried to make them as responsive as possible. I trust, therefore, that you will find that they meet the requirements which you had in mind in developing them.

If there are any omissions in the answers or any points which you feel are not covered adequately, I am, of course, willing to send you such additional material as is required.

Sincerely,

John W. Snyder,
Secretary of the Treasury.

A. Congressional Policy Directives

1. State, citing the appropriate statutes, all of the policy directives bearing upon economic objectives which have been given by Congress to the Treasury Department as a guide to the use of the powers entrusted to it.

Nearly all of the legislation which has been passed by the Congress relating to Treasury responsibilities has had definite economic objectives; and the fact that the Congress directed the Secretary of the Treasury to carry out the legislation has constituted in itself, in most cases, a policy directive. Generally, also, the circumstances leading to the passage of the various statutes have made clear the economic objectives which the Congress had in mind in enacting the legislation.

Some of the laws which have been passed have had detailed provisions defining the purposes of the acts and objectives which are to be achieved in carrying them out. In other cases, the objectives have been implicit in the very nature of the legislation. Accordingly, the answer to this question, it seems to me, requires more than just a current list of major statutes under which the Treasury endeavors to carry out its economic objectives. (See Exhibit A, p. 205.) Such a list does not tell the whole story. It does not indicate how Treasury responsibilities, like those of the rest of the Government, have developed over a period of years in a flexible way and not merely by statute.

Neither does it indicate how Treasury policies on economic matters have developed within the general framework established by the Congress. It is with this in mind that a discussion of the historical development of Treasury activities in the economic area is presented in addition to the citations listed in Exhibit A.

A survey of the Finance Reports of the Secretaries of the Treasury makes it clear that historically the Treasury has attempted to carry out the responsibilities with which it is charged by law with a continuous recognition of their significance in the economic life of the Nation. The Employment Act of 1946 now represents the basic policy directive bearing upon economic objectives for the Treasury, as well as for other Government departments and agencies. Long before the Employment Act of 1946 was passed, however, the Treasury was endeavoring to manage its responsibilities with a view, on the one hand, to the immediate problems of fluctuations in business and an awareness, on the other hand, of the importance of facilitating the long-term economic growth of the country. The basic directive in this respect is the directive contained in the statute establishing the Department in 1789, which set forth the duties of the Secretary of the Treasury as follows:

> That it shall be the duty of the Secretary of the Treasury to digest and prepare plans for the improvement and management of the revenue, and for the support of public credit; to prepare and report estimates of the public revenue, and the public expenditures; to superintend the collection of the revenue; to decide on the forms of keeping and stating accounts and making returns, and to grant under the limitations herein established, or to be hereafter provided, all warrants for monies to be issued from the Treasury, in pursuance of appropriations by law; to execute such services relative to the sale of the lands belonging to the United States, as may be by law required of him; to make report, and give information to either branch of the legislature, in person or in writing (as he may be required), respecting all matters referred to him by the Senate or House of Representatives, or which shall appertain to his office; and generally to perform all such services relative to the finances, as he shall be directed to perform (1 Stat. 65).

The provisions of this basic statute gave the Treasury Department, from the beginning of the Nation, responsibilities which were at the very heart of the economic problems of the country. The Treasury Department was, in fact, in the early days of our country, the sole "economic department" of the Government. And, as the country developed, the Congress gave the Treasury new and extended responsibilities bearing on economic objectives. Over the years, the duties which the Congress has instructed the Treasury to carry out have reflected a great many of the important economic problems which have engaged the attention of the country during the more than 160 years of its existence as a Republic.

The Reports of the Secretary of the Treasury, beginning with the first Report prepared by Alexander Hamilton, as well as the numerous other papers relating to Treasury matters, indicate that successive Secretaries of the Treasury have been acutely conscious of the economic responsibilities which have been placed upon them. The material which follows, largely from Treasury Reports, is illustrative of this economic awareness in a selected number of areas.

1. Support of the Public Credit and the Revenue System

The first and basic policy directives laid upon the Secretary of the Treasury, as already noted, were in the original Act of 1789. Of the list of duties which the Congress prescribed for the Treasury at that time, the most significant historically was to "prepare plans for the improvement and management of the revenue, and for the support of public credit . . . ." (1 Stat. 65).

The Congress retained as its prerogative, of course, the final judgment with respect to the nature and volume of revenues and expenditures of the Federal Government; and the support of the public credit predominantly depends upon Congressional policy in this area. Nevertheless, the Secretary of the Treasury has important responsibility for the support of the public credit as well as for the revenue system of the country in advising Congress on revenue measures and in executing by appropriate operations the policies which have been decided upon.

From the earliest days of the Treasury, the Secretaries regularly have formulated and submitted to Congress programs for meeting the revenue needs of the Government. From the earliest days, when the revenues were derived mainly from import duties, the economic significance of provisions for the revenues was carefully weighed. The revenue programs prepared today reflect both the great economic development of the country and its changed position internationally. Formulation of these programs, touching as they do on so many aspects of economic life, requires detailed consideration of their impact on the various segments of the economy and their interrelationships.

The support of the public credit in 1789, as at the present time, required the successful management of the public debt. Only 19 days after the Treasury was established, the House of Representatives, "as a matter of high importance to the national honor and prosperity," directed the Secretary of the Treasury to prepare a plan for the payment of the debt. The ensuing report, Hamilton's first to Congress, was submitted on January 9, 1790, as his Report on Public Credit. In it, Hamilton stressed the importance of the function of supporting the public credit. He said it was an objective on which "materially depends . . . the individual and aggregate prosperity of the citizens of the United States. . . ." Ever since, support of the public credit has been the major objective of successive Secretaries of the Treasury, and properly so. Foreign experience throughout history has shown how closely connected the public credit is with social and economic stability. Many examples come to mind of nations whose whole social structure collapsed when the public credit failed. Clearly, the support of the public credit was the No. 1 objective entrusted to the Treasury by the Congress. Clearly, it was understood that this had economic implications of the greatest significance.

The financial history of the Federal Government shows that the successive Secretaries of the Treasury regularly prepared plans for financing the needs of the Government and for the management of the public debt. Amounts, terms, and conditions of loans were recommended by the Secretaries to Congress. Sometimes legislation authorizing the loans was more specific than at other times, depending upon: The circumstances, the allied issues involved, and the nature of the recommendations of the Secretaries of the Treasury.

In the twentieth century, the statutes were broadened to enlarge the authority of the Treasury in managing the public debt. As the financing requirements to meet the needs of the country increased during World War I, Congress gave the Secretary of the Treasury substantial authority with respect to the several classes of obligations authorized to be issued. Since then, Congress has further expanded the powers of the Secretary of the Treasury to issue new types of public debt securities.

One of the early economic directives given the Secretary of the Treasury was the authority for Government purchases of public debt securities. At the beginning of 1790, one-seventh of the Federal and State debt was held by Europeans. At that time, Hamilton was disturbed by foreign speculation in the debt while it was below par. Since the country's great need was moneyed capital, he pointed out in his Report on Public Credit that the difference between the market price and par aggregated a sum which, if kept in the country, could have gone toward developing American agriculture, industry, and trade. Within the year, Congress recognized this and other economic implications of the debt. An Act approved August 12, 1790 (1 Stat. 186), authorized the purchase of public debt securities in order to reduce the debt, to benefit the creditors of the United States by raising the price of the securities, and to save money for the Government. Although not specified in the Act, it was understood that one purpose of this provision was the raising of the price of these securities to prevent their transfer to Europe at depreciated prices.

Later, for many years of the nineteenth century, the power of buying up Government securities was the chief means available to the Secretary of the Treasury to ease financial stringencies. When revenue surpluses or other causes threatened to tighten the money market unduly, public debt reduction returned funds to the banks.

2. Handling of Public Moneys

The early records indicate that from the very beginning of the Republic, the Secretary of the Treasury and the Congress had considerable understanding of the economic importance of the inflow and outflow of Treasury funds. In Hamilton's first Report on Public Credit, he suggested, "In order to keep up a due circulation of money" it would "be expedient that the interest of the debt should be paid quarter-yearly. . . ." Congress provided for this in the Act of August 4, 1790 (1 Stat. 138). In 1793, in a report to Congress on loans, Hamilton stated that one reason for the timing of certain Government purchases of the public debt securities was ". . . that, during the winter, in this country, there is always a scarcity of money in the towns—a circumstance calculated to damp the prices of stock [bonds]."

In the years following, successive Secretaries of the Treasury were confronted from time to time with the effect on the economy of the flow of Treasury funds. For many years, however, they were hampered by weaknesses in the money and banking system, which made it difficult to meet the requirements of the rapid and uneven expansion of the country. There is no need to review here the history of the two Banks of the United States, of the State banks, of the structure of the national banking system, and of the Independent Treasury, established by an Act of 1846, the intent of which was to divorce the Treasury from both the money market and the banks.

There is evidence from early days, however, that Treasury officials were thinking about Treasury finance in relation to the money market as a whole. Thus, in his annual Report for 1823, Secretary Crawford, in commenting on the Treasury surplus at that time, said ". . . it is not deemed conducive to the general prosperity of the nation that so large an amount should be drawn from the hands of individuals, and suffered to lie inactive in the vaults of the banks. . . ."

Later, in his annual Report for 1856, Secretary Guthrie reported that "The independent treasury, when over-trading takes place, gradually fills its vaults, withdraws the [private] deposites, and, pressing the banks, the merchants and the dealers, exercises that temperate and timely control, which serves to secure the fortunes of individuals, and preserve the general prosperity." In the following year, 1857, Secretary Cobb had occasion to use his powers in the opposite direction, supplying additional funds to the market by purchasing Government bonds from the public.

By the 1890's, there was general dissatisfaction with the banking and credit system; and Treasury Secretaries and other officials openly criticized the provisions of the Act establishing the Independent Treasury and suggested changes. Moreover, in a series of recurring financial crises, they tried certain new procedures, some of which Congress later confirmed by statute.

In 1898, Secretary Gage put into effect a policy of using Government deposits as a means of regulating continuously the condition of the money market. In his reply in January 1900 to a Congressional inquiry concerning certain aspects of this policy, Secretary Gage pointed out:

> For more than half a century it has been the established policy of the Government to endeavor, wherever it may, to contribute toward the avoidance of commercial disaster. If Secretary Windom may be quoted as an authority, attention is called to the following extract from his annual report for 1890:
>
> "The policy of affording 'relief to the money market,' now so much criticized in certain quarters is by no means a new thing. It has been the uniform policy of the Government, when possible, in all commercial crises from 1846 to the present time."

In summing up his reply to the inquiry, Secretary Gage stated in part:

> . . . The reason for utilizing national banks as depositaries for public moneys, as authorized by law, when the receipts of the Treasury were exceeding its expenditures, has been to avoid the disturbance to business which the withdrawal of large sums of money from active circulation to the Treasury vaults must inevitably cause. The policy thus pursued by me has been the established policy of the Government for many years, and a departure from it under certain conditions would certainly cause disastrous results.

During the incumbency of Secretary Shaw, from 1902 to 1907, the policy of using the Treasury powers to stabilize credit conditions was carried still further. He used Treasury funds to ease seasonal monetary strains and instituted a number of new regulations and procedures. Shaw came to the extreme conclusion in one of his Reports that in the power to deposit or withdraw Government funds "No central or Government bank in the world can so readily influence financial conditions throughout the world as can the Secretary of the Treasury under the authority with which he is now clothed."

This recognition of the Treasury's responsibility to handle its deposits most advantageously for the economy was a development which came with increasing knowledge and experience. The introduction of the Federal Reserve System in 1913 did not lessen the Treasury's responsibility to handle the public moneys in a manner consistent with the best interests of the economy.

Subsequently—beginning in World War I—the Treasury, with the cooperation of the Federal Reserve System, developed techniques for handling Treasury accounts in commercial banks, which were designed to ease money market problems. In more recent years, the growth of Government expenditures beyond $50 billion annually and of Treasury deposits to $5 billion and more, has made the handling of Treasury funds more important than ever. The flow of huge amounts of Treasury receipts and expenditures inevitably affects the size and distribution of monetary reserves in the commercial banking system and has a far-reaching effect upon the private credit structure. Such matters are discussed in much greater length in the answer to Question 14.

3. Managing Our Gold and Silver Reserves

The Treasury has always been designated as the custodian of all of the metallic reserves of the country's monetary system or, during the interval when the Federal Reserve Banks also owned and held gold, of a major portion of such reserves. The statutes over the years have generally laid down in broad directives what should be done consistent with the need for a sound currency and the maintenance of the public credit. One of the major examples of this method of procedure was the gold parity provision in the Gold Standard Act of 1900 and the Act of May 12, 1933 (31 U. S. C. 314), that the gold dollar shall be the standard unit of value and all forms of money issued or coined by the United States shall be maintained at a parity with this standard and it shall be the duty of the Secretary of the Treasury to maintain such parity.

The Gold Reserve Act of 1934 (48 Stat. 337) gave the Treasury the custody and control of the country's gold reserves and gold transactions, within the framework of certain broad standards prescribed in the Act, as discussed in detail in the answer to Question 12. A number of acts have placed responsibilities on the Treasury regarding the country's silver stocks, including provision for purchases, coinage, sales to industry, and loans of silver for use in Government manufacturing functions.

4. International Finance

The policies and problems of external finance are inextricably interwoven with domestic financial policies and problems; and since the earliest days of the Republic, the Treasury has assumed a major role in formulating Executive decisions relative to American external financial relations. Since World War I, the economic responsibilities delegated by Congress to the Treasury in international areas have been of increasing diversity and importance. The character of these responsibilities has changed greatly from the early years of the Republic when the United States played a relatively small role in international trade and finance, up to the present time when this country has emerged as the most powerful economy in the world, and by far the world's leading creditor nation.

The Act of April 24, 1917 (40 Stat. 35), authorized the Secretary of the Treasury to establish credits in favor of the allied governments to be used for the procurement of war supplies in the United States. The spending activities of the foreign governments were coordinated with our own procurement program by a commission established by the Secretary of the Treasury with the approval of the President. An Act of February 9, 1922 (42 Stat. 363), created the World War Foreign Debt Commission to negotiate refunding and conversion of these wartime obligations. The Secretary of the Treasury was Chairman of this Commission, and the President appointed as the other members the Secretary of State, the Secretary of Commerce, a member of the Senate, and a member of the House. The membership of the Commission was increased to eight by the Act of February 28, 1923 (42 Stat. 1325), which also continued the Secretary of the Treasury as Chairman.

During the first World War, the Treasury also handled the procurement of foreign currencies needed for our purposes; and a 1918 supplement to the Second Liberty Bond Act (40 Stat. 965, 966) authorized the Secretary of the Treasury to "make arrangements in or with foreign countries to stabilize the foreign exchanges and to obtain foreign currencies and credits in such currencies, and he may use any such credits and foreign currencies for the purpose of stabilizing or rectifying the foreign exchanges. . . ."

A series of administrative orders and legislative acts in 1933 and 1934, including the Gold Reserve Act, centralized the gold reserves in the Treasury and established an international gold bullion standard for the United States. The Gold Reserve Act of 1934, among other things, set up the Exchange Stabilization Fund; and under its authority, the Treasury has from time to time made agreements with foreign countries for stabilizing the exchange rate between the dollar and foreign currencies. In 1936 the Tripartite Accord between the United States, the United Kingdom, and France provided for close cooperation and consultation in exchange rate matters. Subsequently, other countries joined this Accord.

During the second World War, the Treasury again had an important role in formulating, establishing, and coordinating policies for financing the allied war effort through programs of financial assistance, transactions in gold and currencies, and supplementary agreements with the allied countries. The Treasury Department, through the Foreign Funds Control, administered the blocking measures which were established in 1940 under Section 5 (b) of the Trading with the Enemy Act (12 U. S. C. 95a) to protect the assets of countries in Europe that had been overrun by the Axis powers. Specific congressional approval was given to the basic Executive Order No. 8389 of April 10, 1940, and the regulations and rulings under it by the Joint Resolution of May 7, 1940 (54 Stat. 179). In 1941 these controls were extended to the assets of the Axis and of a number of neutral countries to prevent their use contrary to the national interests of the United States. Similar controls, administered by the Foreign Assets Control, were established in December 1950 over assets of communist China and North Korea.

Toward the close of the war, the Treasury began the preparation and negotiation of multilateral agreements designed to aid in the maintenance of exchange stability and the extension of credits needed for postwar reconstruction. These negotiations culminated in the United Nations Monetary and Financial Conference at Bretton Woods in 1944. This Conference drafted the Articles of Agreement for the International Monetary Fund and the International Bank of Reconstruction and Development. The Bretton Woods Agreements Act of 1945 (22 U. S. C. 286–286k) provided for United States membership in these international bodies in accordance with the Articles. The Secretary of the Treasury is the United States Governor on the Boards of Governors of both institutions. The Act also created the National Advisory Council on Monetary and Financial Problems with the Secretary of the Treasury as Chairman, and with the Secretaries of State and Commerce and the Chairman of the Board of Governors of the Federal Reserve System and the Chairman of the Export-Import Bank as members. The Foreign Assistance Act of 1948 included the Administrator for Economic Cooperation as a member of the Council, and the Mutual Security Act of 1951 replaced him by the Director for Mutual Security. The Council is required to coordinate policies and operations of all agencies of the Government which make or participate in making foreign loans, or which engage in foreign exchange or monetary transactions. The Council gives guidance to United States representatives on the International Monetary Fund and the International Bank, and advises the President on international financial matters. The Secretary of the Treasury, in consultation with the National Advisory Council, administers the Anglo-American Financial Agreement of December 6, 1945, as authorized by a Joint Resolution of July 15, 1946 (22 U. S. C. 286l).

With the inauguration of foreign assistance programs under the Interim Aid Act, the Foreign Assistance Act of 1948 and its amendments, and the Mutual Security Act of 1951, the Council has from time to time made recommendations to the Congress on the financial aspects of these programs and subsequently has advised the administering agencies. With the shift in emphasis from economic recovery assistance to the task of strengthening the defenses of the United States and the free world, the Secretary of the Treasury was invited by the President to participate in the National Security Council, which considers over-all problems affecting the national defense.

In addition to these major functions, the Treasury also advises other agencies of the Government, such as the Department of State, the Department of Defense, and various independent agencies on a wide variety of international financial problems arising from their operations abroad.

Exhibit A

List of current major statutes which bear upon economic objectives of the Treasury Department

Section 1 of the Employment Act of 1946 (15 U. S. C. 1021), declaring it to be the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy to create and maintain (in a manner calculated to foster and promote free competitive enterprise and the general welfare) maximum employment, production, and purchasing power.

Act of September 2, 1789, as amended (5 U. S. C. 242), prescribing the general duties of the Secretary of the Treasury.

Second Liberty Bond Act, as amended (31 U. S. C. 747, 752–754, 757–758, 760, 764–766, 769–771, 773, 774 (2), 801), containing the basic authority for the issuance of securities of the United States and vesting broad authority in the Secretary of the Treasury in connection with such issuance and the deposit of the proceeds.

Section 15 of the Federal Reserve Act (12 U. S. C. 391), providing that moneys in the general fund of the Treasury and the revenues of the Government may be deposited in the Federal Reserve Banks upon direction of the Secretary of the Treasury.

Bretton Woods Agreements Act (22 U. S. C. 286–286k), providing for United States membership in the International Monetary Fund and the International Bank for Reconstruction and Development and creating the National Advisory Council on Monetary and Financial Problems with the Secretary of the Treasury as Chairman of the Council.

Gold Reserve Act of 1934, as amended (31 U. S. C. 315b, 405b, 408a, 408b, 440–446, 752, 754a, 754b, 767, 821, 822a, 822b, 824; 12 U. S. C. 213, 411–415, 417, 467), authorizing the Secretary of the Treasury to purchase and sell gold and to prescribe the conditions under which it may be acquired and held.

The gold parity statutes contained in the Gold Standard Act of 1900 and the Act of May 12, 1933 (31 U. S. C. 314), making it the duty of the Secretary of the Treasury to maintain all money of the United States at parity with the gold dollar.

Silver Purchase Act of 1934, as amended (31 U. S. C. 311a, 316a, 316b, 405a, 448–448e, 734a, 734b), authorizing the Secretary of the Treasury to purchase and sell silver.

Section 4 of the Emergency Banking Act of 1933 (12 U. S. C. 95), prohibiting member banks of the Federal Reserve System, during such emergency periods as the President may prescribe, from transacting any banking business except to the extent permitted by the Secretary of the Treasury, with the approval of the President.

Section 5b of the Trading with the Enemy Act, as amended (12 U. S. C. 95a), granting to the President broad powers in time of war or national emergency over financial transactions, which powers have been delegated to the Secretary of the Treasury.

Thomas Amendment to the Agricultural Relief Act of 1933 (31 U. S. C. 821), authorizing the President to direct the Secretary of the Treasury to enter into agreements with the Federal Reserve System whereby the Federal Reserve Banks will (1) conduct open market operations in Government obligations and (2) purchase directly and hold in portfolio Government obligations in an aggregate sum of $3 billion in addition to those they may then hold; the original provision in the Act authorizing the President to take certain other measures in event such agreements could not be reached has since been terminated.

2. State the general economic objectives which the Treasury Department seeks to further through the use of the powers which have been given to it by Congress. Emphasize particularly the over-all objectives of the Treasury Department in managing the public debt.

The general economic objectives of the Treasury Department are those expressed by the Congress in the declaration of policy contained in the Employment Act of 1946. So far as is practicable, the Treasury Department endeavors to determine and administer its policies with a view to promoting maximum employment, production, and purchasing power under a competitive free enterprise economy.

The discharge of its special responsibilities under the law is consistent with these general objectives. I might broadly summarize what I conceive to be its major objectives as follows:

1. To Maintain Confidence in the Credit of the United States Government

This has been the basic objective of the Treasury since it was first established. Every Secretary of the Treasury has recognized that, in peace or war, any substantial impairment of the credit of the Federal Government would be a major blow to the maintenance of high-level production and employment, and to the orderly operation of our private enterprise system. Every effort has been bent, therefore, to maintain confidence in the Government's credit.

In the broadest sense, safeguarding the credit of the Government depends on our ability as a Nation to keep our free enterprise economy healthy and growing, and to use our governmental instruments wisely in promoting this end. In the financial area alone, however, maintenance of confidence in the credit of the Government requires action on many fronts.

With respect to our domestic policies, this objective requires revenue and expenditure programs which operate within the framework of a Federal budget policy appropriate to economic conditions. It requires continuing attention to greater efficiency and lower costs of governmental operations. It requires a debt management policy which acts to counter any pronounced inflationary or deflationary pressures; which provides securities which meet the current needs of various groups for investment outlets; and which succeeds in maintaining a sound market for United States Government securities. It requires the use of debt policy cooperatively with monetary-credit policy to contribute toward healthy economic growth and reasonable stability in the value of the dollar. It requires the conduct of day-to-day financial operations of the Treasury so as to avoid disruptive effects in the money markets and to complement other economic programs. It requires keeping down the interest cost of the public debt, to the extent that this is consistent with other policy objectives. (See the answer to Question 29.) In matters which reach into the international area, maintenance of confidence in the credit of the United States requires appropriate international financial policies and management of gold and silver reserves with the aim of maintaining a sound currency domestically and internationally.

2. To Promote Revenue and Expenditure Programs which Operate within the Framework of a Federal Budget Policy Appropriate to Economic Conditions

It is clear that an important part of the responsibilities which have just been detailed, particularly those relating to revenues and expenditures, rests directly on the American people and on their elected representatives in Congress. In each of the policy areas which have been mentioned, however, the Secretary of the Treasury has been charged by Congress with certain specific responsibilities. As a result, the Secretary of the Treasury has a clear obligation to advise the Congress on revenue matters and to manage the revenues, within the limitations set down by law, in the best interests of the economy.

With this in mind, the Treasury repeatedly urged that sufficient taxes be levied to cover Government expenditures during the present period. The Treasury also urged the importance of having the right kinds of taxes consistent with a strong free enterprise system. To seek revenue by taxation is not enough. The burden of the taxes must be equitably distributed; and furthermore it must be adjusted in such a way as to preserve the incentives of our free enterprise system.

Both revenue and expenditure policies, of course, operate within the broad framework of the Federal budget. Through action of Congress and by Executive decisions, the budget is subject to constant change; and it is of the utmost importance that it be kept appropriate to changing economic circumstances.

In the executive branch, work on the budget programs is divided between the Bureau of the Budget (which handles the expenditure side) and the Treasury (which is responsible for the revenue side). Both agencies work closely with the President who, of course, makes the final decisions as to the programs embodied in the Federal budget.

The ultimate decisions on receipts and expenditures are made of course by the Congress.

A major budget objective, in my opinion, is to plan our receipts and expenditures so that there is a budget surplus in inflationary periods. This offers a counter-inflationary drag and helps to keep the debt down. Both President Truman and I have repeatedly stressed the importance of reducing the level of the public debt in periods of prosperity such as we have enjoyed since the close of World War II. The progress made in debt reduction between the end of the war and the present provides us with a lower base to which any future net borrowing would be added. As I have stated on many occasions, I am committed to the position that the Treasury should press toward reduction in the present high level of the debt whenever this is consistent with our basic economic objectives.

3. To Give Continuing Attention to Greater Efficiency and Lower Costs of Governmental Operations

In addition to specific duties and advisory functions with respect to revenue and budget policies, the Secretary of the Treasury, along with the heads of other departments and agencies of the Government, has a continuing obligation to keep Government expenditures down by promoting maximum efficiency of Government operations at a minimum cost to the taxpayers.

This is a management function which has been given particular thought and attention in the Treasury Department during the postwar period. Both within the Department and in association with other bureaus and agencies of the Government, gratifying progress has been made by the Treasury during recent years in promoting efficiency of operations, uniformity of accounting and other financial practices, elimination of overlapping services, and improvement of operating techniques in general. While management improvement programs seldom make the headlines, they are of very great importance in assuring the maintenance of a well-run Government—one of the essentials, in my view, of a Federal Government credit position which will command the continuing confidence of the citizens of the Nation. (A memorandum on management improvements in the Treasury Department will be found in the Appendix appearing on p. 396.)

4. To Direct our Debt Management Programs toward (a) Countering Any Pronounced Inflationary or Deflationary Pressures, (b) Providing Securities to Meet the Current Needs of Various Investor Groups, and (c) Maintaining a Sound Market for United States Government Securities

(*a*) *Countering any pronounced inflationary or deflationary pressures.*—In order to counter any pronounced inflationary or deflationary pressures, the Treasury endeavors to arrange its borrowing and debt payoffs so that the net effect is to help contract bank deposits in boom periods and expand them in depressed periods.

For example, in the last five fiscal years (ending June 30, 1951), during which inflationary pressures were strong most of the time, the Treasury retired holdings of Federal securities of commercial and Federal Reserve Banks by almost $27 billion. Three sources of funds were used: $8 billion of budget surpluses; $12 billion of increase in nonbank ownership of Federal securities, largely by Government trust funds; and $7 billion of reduction in the Treasury's own cash balance. By working with the Federal Reserve to provide the proper impact on bank reserves and bank deposits, the Treasury was able to coordinate its efforts with the Federal Reserve program at this time. The significance of this debt reduction program becomes apparent when it is noted that the amount of the reduction in Government holdings of the commercial banking system was almost sufficient to offset the increase in bank credit to private borrowers which took place during the same period. In the absence of the Treasury's aggressive program for reducing bank-held debt, inflationary pressures might have been more serious.

Another way in which the Treasury has acted to counter inflationary pressures during the postwar period has been to encourage people to have rather than spend. We have tried to encourage savings in general, as well as investment in United States savings bonds.

The Treasury may also help to combat an inflationary or deflationary situation by means of the influence which it exercises, through suitable debt management policies, in the money and investment markets. This influence is brought to bear through actions which are taken to meet changing supply and demand relationships for Treasury securities of various maturity groups. The Treasury can "flood or starve" certain parts of the market and thereby produce fundamental changes affecting liquidity, bank reserves and deposits, and interest rates. This matter is discussed more fully in the answer to Question 32.

(*b*) *Providing securities to meet the current needs of various investor groups.*—The Treasury's program of providing securities which meet the needs of the various investor classes has made it possible to place a large amount of Government securities with nonbank investors. During the postwar period, when inflationary pressures have predominated for a large part of the time, this has been particularly important. The Treasury's action in this respect made it possible, moreover, to reduce bank-held debt substantially.

The Treasury's saving bond program is particularly well adapted to the needs of small investors. With respect to other investor groups, the Treasury has maintained a constant study of the investment markets in order to provide the securities which would succeed in attracting the funds available for investment at the time.

The Treasury recognizes that insurance companies and mutual savings banks, for example, are mainly interested in relatively long-term securities. Business corporations, on the other hand, which are accruing funds to meet their taxes or for working capital purposes, generally seek short-term investments, such as Treasury bills and certificates. Commercial banks, likewise, seek mainly short-term investments. The Treasury recognizes all of these variations in order to tap investment funds appropriately and to succeed in raising the necessary amounts in a manner which will best contribute to stability in the price level and to the smooth operation of the economy in general. The Treasury also recognizes another factor in this connection in planning its security offerings—that is, the need to help maintain the strength and integrity of our private business and financial organizations. These are a vital part of the free enterprise system, and we want them to flourish.

(c) *Maintaining a sound market for United States Government securities.*—With a public debt of the size and importance that it is today a sound market for United States Government obligations is essential to the successful functioning of our financial system. Let me make it clear that I do not regard rigidly fixed prices for marketable Treasury securities as either necessary or desirable. Precipitate fluctuations, however, hold the risk of doing serious injury to the public credit and to the economy. A more detailed discussion of this matter is contained in the answers to other questions in this series. (See the answer to Question 27, in particular.)

In addition to policies which have been aimed directly at maintaining a sound market for Government securities, various other features of the Treasury's debt management programs have contributed to this end. The Treasury has attempted, for example, to maintain an adequate volume of marketable obligations in each maturity class so as to permit readjustments in the types and terms of the securities composing the public debt when these are called for by changing market conditions. Likewise, nonmarketable securities have been used when these suit the needs of different classes of investors, thus keeping certain types of securities out of the market entirely.

The wide use of savings bonds, for example, helps to protect the market. If the present holders of savings bonds were offered only marketable bonds with fixed maturities eight or ten or more years distant, the market would become subject to possible offerings, at unpredictable times and in unpredictable amounts, of a particular security which might not be well suited to the needs of the market or to the needs of the economy at such times. The very fact that the Treasury stands ready to redeem savings bonds at any time at stipulated prices stimulates investor confidence, which in itself encourages small investors to retain their savings bond holdings. Furthermore, when the Treasury has to raise funds to pay for savings bonds which are turned in for redemption, it is able to choose the types of securities best suited at the time to the demands of investors and to the economic situation.

5. *To Use Debt Policy Cooperatively with Monetary-Credit Policy to Contribute Toward Healthy Economic Growth and Reasonable Stability in the Value of the Dollar*

Rapid expansion of bank credit in boom periods and contraction in deflationary periods are generally recognized as important factors in the booms and depressions we have experienced in the past. While it is essential to maintain the freedom of individual banks to allocate their credit among their customers, the Congress and others have long recognized the need to keep fluctuations in the total supply of credit from becoming excessive.

This is one of the main duties of the Federal Reserve System. Since the banking system now holds a large amount of Government securities, it is clear that the Federal Reserve's responsibilities for sound credit policy and the Treasury's responsibilities for sound debt policy are intermingled and must be discharged cooperatively. Our broad objectives are the same. Our problem is to balance the many difficult considerations that enter into policy formation on each particular problem involving both debt management and credit policy.

6. To Conduct the Day-to-Day Financial Operations of the Treasury so as to Avoid Disruptive Effects in the Money Markets and to Complement Other Economic Programs

Treasury financial operations have a significant impact on bank deposits and bank reserves, and are therefore conducted at all times with an eye to the money market. Various devices have been developed to facilitate these operations—particularly operations having to do with the handling of Treasury deposits. In these matters the Treasury works closely with the Federal Reserve System at all times.

The flow of cash in and out of the Treasury influences the monetary situation directly through its effect on bank reserves. The Treasury has sought therefore to use its cash balances in such a way as to smooth out the effects of short-run peaks in Treasury cash receipts and disbursements so that they can be handled through the banking system with a minimum of friction. The Treasury may tighten bank reserves by building up its balances with the Federal Reserve Banks and at the same time drawing down its accounts in commercial banks; and by reversing the procedure it may make bank reserves more plentiful. Careful management of the Treasury cash balance is particularly important at the times when quarterly income tax payments are coming into the Treasury in great volume. (For further discussion, see the answer to Question 14.)

The Treasury also uses various techniques of debt management to assist in smoothing out disturbances in the money market which would otherwise occur around March 15 and other important tax collection dates. This is done principally through the designing of specific marketable securities maturing on these tax payment dates (Tax Anticipation bills) and nonmarketable securities that may be presented directly in payment of taxes (savings notes).

7. To Hold Down the Interest Cost of the Public Debt to the Extent That This Is Consistent with the Foregoing Objectives

It would be a serious error to conclude that the Treasury Department believes that holding down the interest cost of the public debt should be the sole or major goal of debt management. I have never believed that it should be. It is only one of the several objectives of Treasury policy, and it is one that is subsidiary to the primary goals of promoting sound economic growth and stability in our financial system.

On the other hand, I do not concur in the view that the level of interest payments on the public debt is of only minor significance for the economy as a whole. Some of those who hold this view argue, first, that the bulk of our interest payments represents only transfers of income from taxpayers to bondholders within the United States, rather than a consumption of real labor and materials; and, second, that those who receive the interest payments pay back a substantial portion of the amount in taxes.

While acknowledging the element of truth that these views contain, I cannot conclude that the interest burden on the public debt is of negligible importance. In the first place, those who pay the taxes and those who hold the securities are not necessarily identical. In the second place, the transfer of income through collection of taxes and payment by the Government is never painless and costless, however wise the Government may be in devising and administering tax policy.

With taxes at their present high levels, it is increasingly difficult to find additional revenue sources that are reasonably equitable and that do not unduly impair the incentives necessary to the effective functioning of our free enterprise economic system. For these reasons, the Treasury always endeavors to hold interest costs on the public debt to the lowest level consistent with its other objectives. (See the answer to Question 29.)

8. To Assist in Shaping and Coordinating the Foreign Financial Policy of the United States

The Secretary of the Treasury in various capacities plays an important part in the shaping of our foreign financial policy with a view to maintaining a sound currency domestically and internationally, and to promoting a better trade and exchange situation between the United States and other nations. He is Chairman of the National Advisory Council on International Monetary and Financial Problems, a statutory body created under the Bretton Woods Agreements Act in 1945, and charged with coordinating the policies and operations of all Government agencies lending abroad or engaging in foreign financial, exchange, or monetary transactions. The Secretary serves as the United States Governor on the Boards of Governors of the International Monetary Fund and of the International Bank for Reconstruction and Development.

As chief fiscal officer of the Government and as Chairman of the National Advisory Council, the Secretary has certain important responsibilities for advising the President and other officials and representatives of the Government on international financial questions. With the inauguration of foreign assistance programs under the Interim Aid Act, the Foreign Assistance Act of 1948 and its amendments, and the Mutual Security Act of 1951, the Secretary of the Treasury as Chairman of the National Advisory Council has from time to time submitted recommendations of the Council to the Congress on the financial aspects of these programs and, in addition, has advised the administering agencies. With the shift in emphasis from economic recovery assistance to the task of strengthening the defenses of the United States and the free world, the Secretary of the Treasury was invited by the President to participate in the National Security Council, which considers over-all problems affecting the national defense. The Secretary of the Treasury has the further responsibility for maintaining relations with the financial officials of foreign countries in order to take due account of changing developments abroad.

9. To Manage the Gold and Silver Reserves of the Country in a Manner Consistent with Our Other Domestic and Foreign Policy Objectives

With respect to our gold reserves, we maintain equality in value between the American dollar and one thirty-fifth of a fine ounce of gold by our readiness to buy or sell unlimited amounts of gold at this price from and to other governments and their central banks.

We attempt to administer our powers with respect to the issue of silver dollars, silver certificates, silver fractional coins, and the token coins, so as to meet the legitimate needs of trade and to avoid an excessive issue of any of these types of money.

3. Do you believe that the congressional declaration of policy contained in the Employment Act of 1946, which reads as follows:

> The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy, with the assistance and cooperation of industry, agriculture, labor, and State and local governments, 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.

is balanced in its emphasis upon high level employment and price stability, respectively, as objectives of Federal Government policy? Suggest any changes by which you think it might be improved.

The wording of the congressional declaration of policy contained in the Employment Act of 1946 was arrived at after long deliberation by congressional committees. It provides a workable statement of policy and I do not think it needs to be changed at this time. Nevertheless, I believe that the declaration would have been better if it had made reference to the maintenance of general price stability as a complementary goal of economic policy.

In practice, this is not, perhaps, of substantial importance because the statement has generally been interpreted to involve this consideration; and in promoting the aims of the Employment Act of 1946, price stability has been kept in mind. During the postwar period, this has meant almost exclusively efforts to restrain price increases—that is, preventing inflation. The prevention of inflation can certainly be considered to be covered by the phrase "consistent with its needs and obligations and other essential considerations of national policy," and also by the phrase "in a manner calculated to foster and promote free competitive enterprise and the general welfare". The prevention of sharp changes in the general price level in either direction is surely an essential consideration of national policy and of the general welfare. Measures undertaken to promote maximum employment, production, and purchasing power tend by themselves to exert a powerful influence against declines in the general level of prices. But, if prosecuted fully, they are capable of producing undesirable increases in the general price level.

Similarly, Government programs undertaken for other purposes, such as the present defense program, while tending to create and maintain conditions of maximum employment, may also exert a strong inflationary influence unless this is counteracted by (1) judicious taxation to prevent deficit financing; (2) firm credit policy; (3) adequate saving on the part of consumers and business enterprises, and restraint in nondefense Government expenditure programs; (4) effective debt management; and (5) the appropriate use of direct controls.

4. Do you believe that a broad directive with respect to economic policy should be given to the Treasury Department by Congress? If so, state the general character of the directive which you would recommend. If you believe there should be no such directive, state your reasons for this belief.

I do not feel that there is need for any additional broad directive by Congress to the Treasury Department with respect to economic policy. The Treasury Department is subject to the declaration of economic policy contained in the Employment Act of 1946. In declaring the basic objectives of economic policy in that Act, it seems to me that Congress has given the executive agencies, such as the Treasury, about the appropriate amount of guidance. Moreover, as an executive department, the Treasury is further responsible to the President; and its policies consequently reflect those followed by the Executive under the law. Finally, the Treasury has a heritage of economic principles developed over its long history, as has already been explained in the answer to Question 1.

I believe it is part of my responsibility as Secretary of the Treasury to make as clear as possible to Congress and the public the working principles we are trying to use in the Treasury Department. These have been discussed on many occasions, and are set forth in some detail in the answer to Question 2.

B. Policy Formulation in the Executive Branch

5. What are the present powers of the Treasury Department, if any, with respect to the operations of the Federal lending agencies, such as the Reconstruction Finance Corporation, the Federal Housing Administration, and including also the Federal Deposit Insurance Corporation? Enumerate these powers, stating in each case their basis in statute, Executive order, or otherwise.

Generally, the Treasury Department has no statutory power with respect to the volume of loans made by the Federal lending agencies nor, with a few exceptions, does it exercise any voice in the management of the agencies. Under the Government Corporation Control Act the lending agencies' programs are reviewed by the Bureau of the Budget before their inclusion in the annual budget. These budget programs are then subject to such limitations as may be placed upon them by the Congress. Such authority as the Treasury has with respect to the loan, insurance and guarantee policies of the Government agencies largely relates to the terms of securities offered by the agencies in borrowing funds which they, in turn, lend to private borrowers.

In the field of foreign loans, however, there is in existence a coordinating and policy-determining agency. The Secretary of the Treasury is Chairman of the National Advisory Council on International Monetary and Financial Problems, established by the Congress in the Bretton Woods Agreements Act, approved July 31, 1945 (22 U. S. C. 286b). Among other things, the statute directs the Council to coordinate the policies and operations of the representatives of the United States on the International Monetary Fund and the International Bank for Reconstruction and Development, and the various agencies of the Government "to the extent that they make or participate in the making of foreign loans or engage in foreign financial, exchange or monetary transactions."

The question calls for an enumeration of Treasury powers with respect to these agencies and the citation of statutes. For convenience the answer has been divided into two parts, namely, a general review and a detailed enumeration.

1. General Review

There are only a few isolated cases in which the Treasury has any statutory control over lending operations of Government agencies.

Recently[1] the Secretary of the Treasury was made a member of the Loan Policy Board of the Reconstruction Finance Corporation which has the duty of developing the loan policies of that Corporation consistent with the requirements of other broad programs of the Government. Reconstruction Finance Corporation subscriptions to the nonassessable preferred stock of insurance companies (or loans secured by such stock) can be made only upon certification by the Secretary of the Treasury of the necessity for action to increase the capital funds of the companies concerned. In addition, the Secretary of the Treasury, or an officer of the Treasury designated by him, is a member of the Board of Directors of the Federal Farm Mortgage Corporation. Also, the Secretary's approval is required on interest rates in excess of the statutory minimum (a) on loans under Title III of the Servicemen's Readjustment Act of 1944, and (b) on mortgages on large-scale housing projects insured by the Federal Housing Administration.[2]

Many of the lending agencies are authorized to finance their operations through borrowing from the Treasury. The Secretary of the Treasury is authorized to purchase obligations of certain agencies and, within the framework of directives laid down by the President and the Congress, to fix the terms and conditions of such obligations. The President made the following statement in his 1948 Budget Message (January 3, 1947):

> From now on most corporation programs will be revenue-producing. Accordingly, I recommend that corporations be required to reimburse the Treasury for the full cost to it of money advanced to the corporations. Interest paid on borrowings from the Treasury should be based upon the current average rate on outstanding marketable obligations of the United States—now about 1.8%.

Since January 1947, the Congress has provided in several laws relating to Government corporations that the Secretary of the Treasury, in determining the interest rate on borrowings by corporations from the Treasury, shall take into consideration the average interest rate on outstanding marketable securities of the United States.

The Secretary of the Treasury has a certain amount of leeway in determining the interest rate on corporation borrowings from the Treasury, although generally the rate has been based upon the average rate on outstanding marketable securities. Where that average interest rate is not a multiple of one-eighth of 1 percent, the procedure is to fix the rate at the nearest multiple of one-eighth of 1 percent next lower than such average rate.

Under the Government Corporation Control Act, the securities issued for sale to the public by wholly-owned or mixed-ownership Government corporations, "shall be in such forms and denominations, shall have such maturities, shall bear such rates of interest, shall be subject to such terms and conditions, shall be issued in such manner and at such times and sold at such prices as have been or as may be approved by the Secretary of the Treasury," except that any mixed-ownership Government corporation from which Government capital has been entirely withdrawn is exempt from this provision during the period it remains without Government capital. In addition, the Federal intermediate credit banks, the production credit corporations,

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[1] Reorganization Plan No. 1 of 1951.

[2] See Sec. 500 (b) of the Servicemen's Readjustment Act of 1944, as amended (38 U. S. C. Supp. IV 694 (b)); and Sec. 611 of the National Housing Act, as amended (12 U. S. C. Supp. IV 1746 (b) (4)).

the Central Bank for Cooperatives, the regional banks for cooperatives, and the Federal land banks are specifically exempted from this provision, but are required to consult with the Secretary of the Treasury prior to issuing securities; and, in the event an agreement is not reached on the terms of the securities, the Secretary of the Treasury may make a report in writing to the corporation involved, to the President, and to the Congress stating the grounds for his disagreement.

It should be mentioned that in cases where Government capital has been entirely withdrawn from corporations, such corporations have continued to maintain their regular contacts and consultations with the Treasury regarding the terms and conditions of their security issues.

Although the wholly-owned Government corporations and credit agencies do their borrowing directly from the Treasury, there are three agencies that can issue guaranteed securities to the public. These are the Commodity Credit Corporation, the Federal Housing Administration, and the Maritime Administration. The Federal Housing Administration issues guaranteed obligations in settlement of claims in connection with defaults on insured mortgages on real property. Similarly, the Maritime Administration can issue guaranteed obligations in settlement of claims in connection with defaults on insured mortgages on ships and vessels, although in fact this authority has not been used to date. In addition to these agencies that can issue guaranteed obligations, two other wholly owned Government corporations—the Inland Waterways Corporation and the Federal National Mortgage Association—can issue securities in the market, although such securities are not guaranteed by the United States Government. All of these obligations require the approval of the Secretary of the Treasury as to terms, conditions, and interest rates.

The Commodity Credit Corporation is authorized to enter into commodity purchase programs, and makes contracts with private banks for the issuance of letters of credit and for the payment of drafts and invoices by the banks for the account of the Corporation to carry out such programs. Under the terms of these contracts, the banks accept and pay drafts for account of the Commodity Credit Corporation, accept sales proceeds, verify documents and perform other administrative work. The Commodity Credit Corporation pays interest to the banks on funds paid out for its account plus, in some cases, a small fee for services performed by the banks. Since the obligations of the Commodity Credit Corporation held by the banks under these programs are fully guaranteed by the United States, they are subject to approval of the Secretary of the Treasury as to terms, conditions, and interest rates.

There is a special provision of law relating to the Commodity Credit Corporation that does not apply to the other corporations and credit agencies. Under the Act of March 8, 1938, as amended (15 U. S. C. 713a–1), the Secretary of the Treasury is required to make an annual appraisal of the assets and liabilities of the Commodity Credit Corporation. In the event that any such appraisal discloses that the net worth of the Corporation is less than $100,000,000 (which means in effect that the Corporation has operated at a deficit during the preceding year), the Secretary of the Treasury, on behalf of the United States, restores the amount of the capital impairment by a contribution to the Corporation in the amount of such impairment. Although the Congress has authorized appropriations for this purpose, usually the capital impairment has been restored by the Congress authorizing the Secretary of the Treasury to cancel notes of the Corporation held by the Treasury.

In the event that any annual appraisal establishes that the net worth of the Commodity Credit Corporation is in excess of $100,000,000 (which means in effect that the Corporation has operated at a surplus during the preceding year), such excess is required to be deposited in the Treasury as miscellaneous receipts and is required to be used to retire an equivalent amount of the public debt.

Under the provisions of the Government Corporation Control Act, most of the Government corporations and credit agencies must secure the approval of the Secretary of the Treasury for the sale and purchase of United States securities and guaranteed securities in the market in amounts which aggregate more than $100,000 at any one time. The banks for cooperatives, the Federal intermediate credit banks, and the production credit corporations are not required to obtain prior approval of the Secretary of the Treasury, but are required to consult with the Secretary of the Treasury before taking action on the sale and purchase of United States securities and guaranteed securities in the market in amounts which at any one time aggregate more than $100,000.

Under the Government Corporation Control Act, most Government corporations are required to keep their checking accounts with the Treasurer of the United States, although, with the approval of the Secretary of the Treasury, such accounts may be kept with Federal Reserve Banks, or with private banks designated as depositaries or fiscal agents of the United States. The banks for cooperatives, the Federal intermediate credit banks, and the production credit corporations are not required to obtain the approval of the Secretary of the Treasury in order to maintain checking accounts in private banks, but they are required to report annually to the Treasury the names of the depositaries in which they keep such accounts.

In addition to the utilization of Federal Reserve Banks as depositaries and fiscal agents of the United States and the designation of private banks as Government depositaries, the Secretary of the Treasury is authorized by law to designate certain Government corporations to act as depositaries or fiscal agencies of the United States. Generally, however, it has not been necessary to utilize this authority.

The following enumerates in more detail many of the powers and functions of the Treasury Department with respect to the operations of the Federal lending agencies with citations to the applicable statutes:

2. Detailed Enumeration

(*a*) *Representation on Policy Boards.*—The Treasury has limited participation in management and lending policies through representation on policy boards governing the activities of Government agencies, as follows:

Reconstruction Finance Corporation.—The Secretary of the Treasury was recently made a member of the Policy Board of the Corporation, pursuant to Reorganization Plan No. 1 of 1951.

National Advisory Council.—The Secretary of the Treasury is Chairman of the Council, which coordinates foreign lending policies under Section 4 of the Bretton Woods Agreements Act of July 31, 1945 (22 U. S. C. 286b).

Federal Deposit Insurance Corporation.—The Comptroller of the Currency is a director of the Corporation as provided in the Act approved September 21, 1950 (12 U. S. C. Supp. IV 1812).

Federal Farm Mortgage Corporation.—The Fiscal Assistant Secretary of the Treasury represents the Secretary on the Board of Directors of the Corporation in accordance with the provisions of Section 1 of the Act approved January 1, 1934 (12 U. S. C. 1020).

(*b*) *Borrowing from the Treasury.*—Many of the lending agencies are authorized to borrow from the Secretary of the Treasury in order to finance their operations. Also, Section 304 of the Defense Production Act of 1950 (50 U. S. C. Supp. IV War App. 2094) authorizes departments and agencies designated by the President to borrow from the Treasury moneys necessary to carry out functions delegated to them by the President, including the making of loans for defense production purposes. All such borrowing is accomplished by the Secretary's purchasing obligations of the agencies and fixing the terms and conditions of such securities. There follows a list of agencies which are authorized to borrow from the Secretary of the Treasury:

Name of Agency	*U. S. Code or other Authorization*
Government corporations:	
Commodity Credit Corporation	15 U. S. C. 713a-4
Virgin Islands Corporation	48 U. S. C. Supp. IV 1407e
Export-Import Bank of Washington	12 U. S. C. 635d
Federal Deposit Insurance Corporation	12 U. S. C. Supp. IV 1824
Federal Home Loan Banks	12 U. S. C. Supp. IV 1431 (i)
Federal Savings and Loan Insurance Corporation.	12 U. S. C. Supp. IV 1725 (i)
Federal National Mortgage Association	12 U. S. C. Supp. IV 1716 Note
Public Housing Administration	42 U. S. C. Supp. IV 1420
Reconstruction Finance Corporation	15 U. S. C. Supp. IV 606 50 U. S. C. Supp. IV War App., 2094
Unincorporated Government agencies:	
Farmers' Home Administration	Public Law 135, 82nd Congress, approved August 31, 1951
Rural Electrification Administration	Public Law 135, 82nd Congress, approved August 31, 1951
Housing and Home Finance Agency:	
Loans for Slum Clearance and Community Development and Redevelopment.	42 U. S. C. Supp. IV 1452 (e)
Loans by Administrator for Production and Distribution of Prefabricated Housing.	12 U. S. C. Supp. IV 1701g, Note and Public Law 139—82nd Congress, approved September 1, 1951
Housing Loans to Educational Institutions	12 U. S. C. Supp. IV 1749 (b) (c)
Veterans' Administration	38 U. S. C. Supp. IV 694m and Public Law 139—82nd Congress approved September 1, 1951
Secretary of the Army	5 U. S. C. Supp. IV 234
Secretary of Agriculture (Defense)	50 U. S. C. Supp. IV War App. 2094
General Services Administration (Defense)	50 U. S. C. Supp. IV War App., 2094
Secretary of the Interior (Defense Minerals Administration).	50 U. S. C. Supp. IV War App. 2094.

(c) *Borrowing in the Market.*—The following agencies are authorized to borrow money in the market by issuing securities, the terms of which must, pursuant to the provision of law cited below, be approved by the Secretary of the Treasury. Securities of the Commodity Credit Corporation are guaranteed as to principal and interest by the United States Government.

Name of Agency	*U. S. Code or other Authorization*
Commodity Credit Corporation	31 U. S. C. 868 (a)
Federal National Mortgage Association	12 U. S. C. Supp. IV 1717
Inland Waterways Corporation	31 U. S. C. 868 (a)

Under provisions of Section 303 (d) of the Government Corporation Control Act (31 U. S. C. 868 (d)), the Federal home loan banks were required to secure the approval of the Secretary of the Treasury as to terms of their borrowings only when they had Government capital. At the present time, their Government capital has been entirely repaid to the Treasury.

The following agencies are required, pursuant to the provision of law cited below, to consult with the Secretary of the Treasury prior to taking any action involving the issuance of their obligations to the public. Securities of these agencies are not guaranteed by the United States Government.

Name of Agency	*U. S. Code or other Authorization*
Banks for Cooperatives	31 U. S. C. 868 (d)
Federal Intermediate Credit Banks	31 U. S. C. 868 (d)

Under provisions of Section 303 (d) of the Government Corporation Control Act (31 U. S. C. 868 (d)), the Federal land banks are required to consult with the Secretary of the Treasury only when they have Government capital. At the present time, their Government capital has been entirely repaid to the Treasury.

(d) *Lending Operations.*—The only cases where the Secretary of the Treasury has any specific authority with respect to lending operations relate to certain loans (1) made by the Reconstruction Finance Corporation, (2) guaranteed by the Veterans' Administration, and (3) insured by the Federal Housing Administration, as follows:

Under the Reconstruction Finance Corporation Act, as amended (15 U. S. C. Supp. IV 604 (a)), subscriptions to nonassessable preferred stock of insurance companies by the Reconstruction Finance Corporation (or loans secured by such stock) can be made only upon certification by the Secretary of the Treasury of the necessity for action to increase the capital funds of the companies concerned.

Under Section 500 (b) of the Servicemen's Readjustment Act of 1944, as amended (38 U. S. C. Supp. IV 694 (b)), the Administrator of Veterans Affairs has the authority, with the approval of the Secretary of the Treasury, to raise the permissible rate of interest on loans guaranteed under Title III of this Act from the rate specified in the law, namely 4 percent, to a maximum of 4½ percent.

Under Section 611 of the National Housing Act, as amended (12 U. S. C. Supp. IV 1746 (b) (4)), the Federal Housing Commissioner has the authority, with the approval of the Secretary of the Treasury, to insure mortgages on large-scale housing projects with rates in excess of the statutory minimum specified in the law, namely 4 percent, but not in excess of 4½ percent.

(*e*) *Purchase and Sale of United States Securities in the Market.*—The following agencies must secure the approval of the Secretary of the Treasury for the sale and purchase of United States securities and guaranteed securities in the market in amounts which at any one time aggregate more than $100,000:

Name of Agency	*U. S. Code or other Authorization*
Commodity Credit Corporation	31 U. S. C. 868 (b)
Inland Waterways Corporation	31 U. S. C. 868 (b)
Virgin Islands Corporation	31 U. S. C. 868 (b)
Export-Import Bank of Washington	31 U. S. C. 868 (b)
Federal Deposit Insurance Corporation	12 U. S. C. Supp. IV 1823 (a)
Federal Savings and Loan Insurance Corp	31 U. S. C. 868 (b)
Federal National Mortgage Association	31 U. S. C. 868 (b)
Public Housing Administration	31 U. S. C. 868 (b)
Reconstruction Finance Corporation	31 U. S. C. 868 (b)
Federal Housing Administration	31 U. S. C. 868 (b)

Under the provisions of Section 303 (d) of the Government Corporation Control Act (31 U. S. C. 868 (d)), the Federal home loan banks, when they had Government capital, were also subject to the above requirement. At the present time, their Government capital has been entirely repaid to the Treasury.

The following agencies are not required to obtain prior approval of the Secretary of the Treasury, but are required to consult with the Secretary of the Treasury before taking action on the sale and purchase of United States securities and guaranteed securities in the market in amounts which at any one time aggregate more than $100,000.

Name of Agency	*U. S. Code or other Authorization*
Banks for Cooperatives	31 U. S. C. 868 (d)
Federal Intermediate Credit Banks	31 U. S. C. 868 (d)
Production Credit Corporations	31 U. S. C. 868 (d)

Under the provisions of Section 303 (d) of the Government Corporation Control Act (31 U. S. C. 868 (d)), the Federal land banks, when they have Government capital, would also be subject to this Act. At the present time, their Government capital has been entirely repaid to the Treasury.

(*f*) *Depositary Accounts.*—The following agencies are required to keep their checking accounts with the Treasurer of the United States, except that, with the approval of the Secretary of the Treasury, such accounts may be kept in Federal Reserve Banks or private banks which are designated as depositaries by the Secretary.

Name of Agency	*U. S. Code or other Authorization*
Commodity Credit Corporation	31 U. S. C. 867
Inland Waterways Corporation	31 U. S. C. 867
Virgin Islands Corporation	31 U. S. C. 867
Export-Import Bank of Washington	31 U. S. C. 867
Federal Deposit Insurance Corporation	12 U. S. C. Supp. IV 1823 (b)
Federal Savings and Loan Insurance Corp	31 U. S. C. 867
Federal National Mortgage Association	31 U. S. C. 867
Reconstruction Finance Corporation	31 U. S. C. 867
Tennessee Valley Authority	31 U. S. C. 867
Federal Housing Administration	31 U. S. C. 867

Under the provisions of Section 303 (d) of the Government Corporation Control Act (31 U. S. C. 868 (d)), the Federal Home Loan Banks, when they had Government capital, were also subject to the above proviso. At the present time, their Government capital has been entirely repaid to the Treasury.

The following agencies are required to report annually to the Secretary of the Treasury the names of the depositaries in which they keep a banking or checking account; but approval of their depositaries by the Secretary is not required.

Name of Agency	*U. S. Code or other Authorization*
Banks for Cooperatives	31 U. S. C. 867
Federal Intermediate Credit Banks	31 U. S. C. 867
Production Credit Corporations	31 U. S. C. 867

Under the provisions of Section 303 (d) of the Government Corporation Control Act (31 U. S. C. 868 (d)), the Federal land banks, when they have Government capital, would also be subject to the above proviso. At the present time, their Government capital has been entirely repaid to the Treasury.

(*g*) *Capital Stock Subscriptions.*—The Secretary of the Treasury was authorized to subscribe to the capital stock of the following agencies:

Name of Agency	*U. S. Code or other Authorization*
Federal Intermediate Credit Banks	12 U. S. C. 1061 (a)
Reconstruction Finance Corporation	15 U. S. C. Supp. IV 601
Inland Waterways Corporation	49 U. S. C. 152
Export-Import Bank of Washington	12 U. S. C. 635b and 635c
Public Housing Administration	42 U S. C. 1417
Federal Home Loan Banks	12 U. S. C. 1426 (f)
Federal Land Banks	12 U. S. C. 698

Under the Act of January 31, 1934 (12 U. S. C. 1061 (c)), the Governor of the Farm Credit Administration is authorized to subscribe from time to time to the capital stock and/or paid-in surplus of any Federal intermediate credit bank on behalf of the United States, subject to the approval of the Secretary of the Treasury.

(*h*) *Payment of Interest on Capital Stock.*—The following agencies are required to pay interest to the United States Treasury on the amount of their capital stock, at such rates as may be determined by the Secretary of the Treasury in accordance with statutory requirements:

Name of Agency	*U. S. Code or other Authorization*
Commodity Credit Corporation	15 U. S. C. Supp. IV 714e
Federal Savings and Loan Insurance Corp	12 U. S. C. Supp. IV 1725 (h)

(*i*) *Payment of Guaranteed Obligations on Default.*—Since the securities issued by the following agencies are guaranteed as to principal and interest by the United States Government, the Secretary is authorized to pay the amount due if the issuing agency defaults.

Name of Agency	*U. S. Code or other Authorization*
Commodity Credit Corporation	15 U. S. C. Supp. IV 713a-4
Federal Housing Administration	12 U. S. C. 1710 (d) P. L. 139, 82nd Cong., Sec. 201
Maritime Administration	46 U. S. C. 1275 (c)

(*j*) *Depositaries and Fiscal Agents.*—In addition to the Federal Reserve Banks acting as depositaries and fiscal agents of the Treasury and the designation of private banks as depositaries, the Secretary of the Treasury is authorized by law to designate certain Government corporations to act as depositaries or fiscal agencies of the United States, as follows:

Name of Agency	*U. S. Code or other Authorization*
Federal Intermediate Credit Banks	12 U. S. C. 1024
Federal Land Banks	12 U. S. C. 701
Central Bank for Cooperatives	12 U. S. C. 1138b
Banks for Cooperatives	12 U. S. C. 1138b
Production Credit Corporation	12 U. S. C. 1138b
Federal Deposit Insurance Corporation	12 U. S. C. Supp. IV 1823 (b)
Federal Home Loan Banks	12 U. S. C. 1434
Federal Savings and Loan Insurance Corp	12 U. S. C. 1725 (d)
Public Housing Administration	42 U. S. C. 1421 (c)
Reconstruction Finance Corporation	15 U. S. C. Supp. IV 609

(*k*) *Liquidation of the Reconstruction Finance Corporation.*—The Secretary of the Treasury, under the Act of January 22, 1932, as amended (15 U. S. C. Supp. IV 609), will have the duty of completing the liquidation of the Reconstruction Finance Corporation if, at the expiration of the succession of the Corporation, the Administrator shall not have completed the liquidation of its assets and the winding up of its affairs.

6. What additional authority of the Treasury Department with respect to the Federal Deposit Insurance Corporation and the Federal lending agencies would you consider desirable? If you do not believe that additional authority of the Treasury Department with respect to these agencies is desirable, what, if any, additional means of coordinating their activities would you recommend?

It will be noted from the data supplied in the answer to Question 5 that the Treasury does not have statutory authority to coordinate or control the activities of the various Government agencies that lend and insure loans to private domestic borrowers. The policies and operations of these agencies are reviewed by the Bureau of the Budget in the formulation of the President's Budget each year and are subject to further review by the Congress in connection with its consideration of the Budget. The heads of the lending, insuring, and guaranteeing agencies are responsible to the President; and the decisions which they make must be made in accordance with his policies, except, of course, where Congress has itself issued explicit policy directions for making or insuring loans. The heads of these agencies also frequently consult with the Treasury Department, as referred to in the answer to Question 5, in connection with their financing matters.

It is my opinion that no additional authority of the Treasury Department is necessary with respect to these agencies. With respect to additional means of coordinating the activities of these agencies a suggestion—covering a somewhat wider field—is made in the answer to Question 10.

7. Can any policy conflict between the Treasury and the Federal Deposit Insurance Corporation or the lending agencies be resolved in the last resort by the President? If not, what are the exceptions? Do you believe that the President should have (or under the Constitution *does* have) authority to resolve all such conflicts?

The policies of the Government lending agencies are sometimes prescribed by congressional statute and sometimes by Executive discretion. Accordingly, it is necessary to differentiate between congressional policy and Executive policy.

For example, the Secretary of Agriculture is required by statute to support the prices of certain agricultural commodities. Under the statutes, the Secretary of Agriculture is given some discretion to select the type of operation to be used for this purpose; but regardless of whether loans or purchase operations are used, the end results are basically the same. This is the policy fixed by the Congress. Neither the Department of Agriculture nor the President has the right to disregard that directive and to set aside the parity price of an agricultural commodity even though agricultural credit might be rising too freely at a time the Government was pursuing a counter-inflationary program generally. Other programs of Government lending agencies are also laid down by statute, without much discretion in the Executive.

On the other hand, the lending policy of the Reconstruction Finance Corporation is determined largely by Executive discretion within the framework of the broad authorizations provided by Congress.

The volume of insurance extended by the Federal Housing Administration is the product both of congressional policy (which prescribes certain conditions and limits the volume) and of Executive policy (which may speed up or retard activity in various ways).

The President has practically unlimited authority over those policies of the Treasury, the lending agencies, and the Federal Deposit Insurance Corporation, which are determined by Executive discretion. Accordingly, he can resolve conflicts between them which arise from policies of this type. However, the President has no authority to contradict policies which are laid down by the Congress, and therefore cannot resolve conflicts or inconsistencies which arise from that source.

8. What are the present powers of the Treasury Department, if any, with respect to the operations of the Federal Reserve System?

The present powers of the Treasury Department with respect to the operations of the Federal Reserve System relate principally to the duties that the Federal Reserve Banks perform as fiscal agents of the Treasury. (See also the answer to Question 9.) In addition, the two agencies have interrelated functions in the handling of Federal Reserve currency.

FISCAL AGENCY FUNCTIONS

Under the Federal Reserve Act, the Federal Reserve Banks are required to act as fiscal agents of the United States. The Treasury maintains its operating checking accounts with each of the Federal Reserve Banks. As the accounts are drawn on to pay for Government expenditures and public debt payoffs, the accounts are replenished by calls on Treasury deposits in commercial banks.

Under instructions from the Treasury, the Federal Reserve Banks have responsibilities in connection with maintaining the Treasury tax and loan accounts in commercial banks. (See also the answer to Question 14.) Certain taxes and proceeds of sales of Treasury securities are credited in these accounts, and each of these banks must pledge with a Federal Reserve Bank, as fiscal agent of the Treasury, collateral to secure balances in the accounts.

Under instructions from the Treasury, the Federal Reserve Banks perform services relating to the public debt. The Reserve Banks receive subscriptions to new issues of Treasury securities, make allotments of securities in accordance with instructions from the Treasury, deliver the securities to the purchasers, receive payment for them, and credit the amounts received to the Treasury's accounts. The Federal Reserve Banks also redeem securities as they mature, make exchanges of denominations or kinds, handle transfers and conversions, pay interest coupons, and perform a number of other functions involved in servicing the public debt.

In accordance with instructions from the Treasury, the Federal Reserve Bank of New York handles purchases and sales of Government securities in the market on behalf of Government investment accounts. It also acts as the agent of the Treasury in gold and foreign exchange transactions.

FEDERAL RESERVE CURRENCY

The Treasury has certain responsibilities with respect to operations of the Federal Reserve System in connection with the issuance and redemption of Federal Reserve currency. Federal Reserve notes are issued by the Federal Reserve Banks at the discretion of the Board of Governors of the Federal Reserve System in amounts determined by the public demand for currency. They were originally authorized by the Federal Reserve Act in 1913, and account for almost 90 percent of the paper money in circulation in the United States at the present time. The backing for these notes consists of a reserve almost entirely in the form of gold certificates (and gold certificate credits) and United States Government securities. These notes are obligations of the United States as well as of the Federal Reserve Banks and are legal tender for all debts, public and private.

Federal Reserve notes are redeemable either at the Treasury or at any Federal Reserve Bank but as a matter of practice the proportion actually turned in through the Treasury is relatively small. The Federal Reserve Banks are required to maintain a fund in the Treasury to cover redemptions made through the Treasury.

The Treasurer of the United States has the responsibility for verification of all unfit Federal Reserve notes which are presented for redemption through either the Treasury or the Federal Reserve Banks. These notes are then destroyed under the supervision of the Treasury's Bureau of Public Debt.

In order to furnish suitable Federal Reserve notes for circulation, the Comptroller of the Currency, under the direction of the Secretary of the Treasury, is required to cause plates and dies to be engraved. Such notes are required to be in such form as directed by the Secretary.

* * * * * * *

One other matter may be mentioned. It does not represent a power of the Treasury with respect to the Federal Reserve System, but is a working arrangement whereby the Federal Reserve pays over to the Treasury a certain amount of its earnings. This is a formula arrangement which was developed in 1947. A full description is presented in various Federal Reserve reports.

9. What provision, if any, is there for resolving policy conflicts between the Treasury (or other agencies of the executive branch) and the Federal Reserve System? Do you believe that this power should lie with the President (or already does under the Constitution)?

It is presumed that this question directs itself to policy related to the exercise of the central banking functions of the Federal Reserve System which have been specifically delegated to the System by the Congress.

There are, of course, functions of the System clearly within the orbit of Executive responsibility which the Federal Reserve performs by delegation from the President or in which it participates by Congressional designation. It is assumed that the question is not directed to policy related to the exercise of these functions over which the President clearly has control and which include membership on the National Advisory Council on International Monetary and Financial Problems created by the Bretton Woods Agreements Act; the administration of the real estate construction credit control program under the Defense Production Act; the approval under the Defense Production Act of voluntary agreements in the field of financing; and membership on the Defense Mobilization Board established by the President. Other incidents of relationship between the System and the President are found in the President's authority with respect to the Federal Reserve System under the Reorganization Act of 1949; with respect to the clearance of proposed legislation and reports on proposed legislation by the Board of Governors of the System through the Bureau of the Budget; and in the number of important fiscal agency functions performed by the Federal Reserve System on behalf of several parts of the executive establishment.

It is also presumed that the question puts aside consideration of any supervening emergency powers residing in the President (e. g., section 5 (b) of the Trading with the Enemy Act (12 U. S. C. 95a) and section 4 of the Emergency Banking Act of 1933 (12 U. S. C. 95)).

With the question thus limited, it relates to policy conflicts which might arise out of the exercise by the Federal Reserve of its primary powers granted to it by the Congress, such as the power with respect to open market operations.

The only statutory provision dealing directly with conflicts is found in Section 10 of the Federal Reserve Act (12 U. S. C. 246), which provides that "wherever any power vested by this Act in the Board of Governors . . . appears to conflict with the powers of the Secretary of the Treasury, such powers shall be exercised subject to the supervision and control of the Secretary." This statutory provision does not, however, appear to deal with conflicts as to what constitutes appropriate public policy. It has not been drawn upon, therefore, in an effort to resolve that type of conflict.

Where conflicts of the sort the question is assumed to deal with do arise, the first-blush answer might be that the President should settle them. He is the one whom the people hold responsible for the way things go in the economic field, including all monetary and fiscal matters. When there is inflation, he is the one who is generally held responsible by the people; also for deflation, high taxes, low prices, high prices, low interest rates, high interest rates.

However, the Congress has decided that within the executive branch of the Government itself, there should be several independent agencies exercising functions independently of the head of the executive branch, the President. One of these agencies is the Federal Reserve System.

The Constitution has given to the Congress the power to borrow money on the credit of the United States and the power to coin money and regulate the value thereof. Under the present law the Congress has given the exercise of most of this power to the President or the Secretary of the Treasury; but it has given some of it to the Federal Reserve System.

There is no doubt that the Federal Reserve System, with this power given to it by the Congress, could conceivably impede, if not actually obstruct, Government policies which the President of the United States has announced and, indeed, on which he may have been actually elected or re-elected to office. What happens then?

This might become more likely at certain times than at others. For example, in any change of administration, a new President would be faced with a Board of Governors of the Federal Reserve System which had been built up over previous years by appointments by another President. It is possible that the fiscal and monetary policies of the newly elected President (and presumably of his new appointee as Secretary of the Treasury) might be so thoroughly at variance with the policies of the Board that the conflicts might become quite acute.

Of course, the President has complete power over the Secretary of the Treasury and over his actions and policies. The power is exercised simply and irrevocably—by the power to remove the Secretary at will and without cause. The President has no such power over the members of the Board of Governors. While he does appoint them (with the consent of the Senate), they serve for a fixed term, and the statute provides that they cannot be removed by the President except for cause. The Supreme Court has decided in the *Humphrey's* case (295 U. S. 602 (1934)), involving a similar issue although with respect to a different agency, that the Congress could thus limit the power of the President to remove members of independent agencies exercising quasi-legislative or quasi-judicial powers. Hence, since the President does not have the power of removal, it would appear to me that he is without power effectively to direct.

Whether or not this situation should be changed is a matter for the Congress to decide. I do not recommend that it be changed.

The outstanding disadvantage of the present arrangement is that there is no specific authority to resolve quickly any irreconcilable conflict between the policies of the President (or the Secretary of the Treasury) and the Federal Reserve—if and when such a conflict arises.

When there is an impasse between two agencies headed by responsible management they realize that they must get together because the public will demand it. I assume that any prolonged stalemate between the two which began to have serious effects on the economy would lead to an expression of responsible public opinion which would cause one side or the other to give way. While this is a safety valve, it is not a ready or quick means of settling a dispute. And much damage might be done before the settlement was reached.

Then there is the Congress itself. It could pass legislation (subject to Presidential veto) which could resolve the conflict. Or it could go to the extreme of curtailing the power of one of the members to the dispute. While this, too, might be an ultimate solution of a prolonged, dangerous stalemate, it is an undesirable one to rely on as a regular mechanism. Congress would not want to interfere in these matters of administration in the executive branch; it would necessarily have to operate very slowly and only after prolonged hearings and testimony by experts. Obviously, it would be wholly undesirable to try to change legislation whenever a dispute arose—serious as it might be—especially since the differences might be based on highly technical and expert opinions on both sides. Of course, if, by any stretch of imagination, the Board were in bad faith to adopt purely obstructionist tactics in order to enforce its will—so that, in effect, it was interfering with the orderly functioning of the Government—that would be a different matter. But that has never happened, and we should not assume that it ever would happen.

The kind of conflicts in policy which have arisen are set forth in the answer to Question 17. It will be seen that they have arisen from bona fide differences of opinion. In the main, they have eventually been ironed out satisfactorily.

I think one of the most important steps toward providing a quick means of settling such disputes would be a public, and a congressional, recognition of the fact that it is natural, proper, and desirable for the President to seek to settle them by having all the interested parties sit around a table to discuss their differences with him. That would seem to be an almost axiomatic method of solution of a dispute. Yet, in some quarters, if the President should ask the Chairman or any other member of the Board of Governors to come to the White House to discuss differences of policy which were having some effect on Government objectives, there would be loud objections and charges of attempted domination or dictation. I do not think that any President, in the present state of the law, would seek to dictate to or interfere with the Federal Reserve. But since the two—the President and the Board—are assumed to be independent of each other, the very essence of that independence should be recognized—that they should each have the right—and the duty—to discuss the problem freely around a table together. This should be encouraged by the Congress and the public, rather than discouraged. Discouragement comes from charges or insinuations that such conferences amount to attempted dictation. It would encourage such discussions and conferences if this committee of the Congress would publicly recommend them.

The fact is that in the past the President and the Chairman of the Board have frequently met and discussed problems and differences. Occasionally, the Secretary of the Treasury has been present. In such meetings between the President and the Chairman about which

I have received reports, there were no attempts at dictation by one to another. There was only a bona fide, sincere attempt on each side to express his own point of view, understand the other's point of view, and come to a conclusion in the public interest. The Secretary of the Treasury and the Chairman of the Board also meet in several interdepartmental committees of Government, such as the National Advisory Council on International Monetary and Financial Problems and others. Such contacts with each other are helpful in avoiding differences.

I should say, therefore, in answer to this question that the present methods for resolving policy conflicts are through (1) the give and take resulting from discussion around the table, (2) the force of public opinion, and (3) congressional action. I do not suggest that the President should be given any powers which he does not now have to resolve such disputes.

10. If you do not believe that the President should (or does) have such power, how, in your opinion, should policy conflicts be resolved? Is it necessary that they be resolved or could the agencies directly responsible to the President, on the one hand, and the Federal Reserve System, on the other, pursue conflicting policies indefinitely?

As I have indicated in my answer to the preceding question, I think that the President can settle, and should be encouraged by public opinion and by congressional approval, to seek to settle differences in the usual manner of any two independent agencies—by discussion, negotiation and argument.

I certainly do not think, in answer to this question, that the Treasury and the Federal Reserve System should pursue conflicting policies indefinitely. I doubt whether either public opinion or the Congress would permit them to do so.

The only improvement in the present situation which I recommend would be the encouragement of discussion and negotiation between the two in order, first, to prevent disagreement from arising, and secondly, to terminate the disagreement once it arises.

Such steps would include:

1. The recognition by the Congress and the public that the President has the right, and the duty, to discuss disputes without attempting to dictate to the Board of Governors, but by full and complete consultation with the Board.

2. The creation of a small consultative and discussion group within the Government, to consist of the Secretary of the Treasury, the Chairman of the Board of Governors, the Director of the Budget, the Chairman of the Council of Economic Advisers to the President, and the Chairman of the Securities and Exchange Commission. I would have this group meet informally but regularly and frequently for the purpose of discussing domestic monetary and fiscal matters with each other. Heads of the lending agencies would be called in for these meetings from time to time when the discussions involved their programs. This group would in a way be a kind of parallel to the National Advisory Council which works in the field of foreign financial matters. It would also be akin to the Council suggested by the Commission on Organization of the Executive Branch of the

Government (the Hoover Commission) in its report on the Treasury Department. The Council there suggested (Recommendation No. 9) was to advise on policies and coordinate the operations of the domestic lending and Government financial guarantees.

The group I am suggesting would serve two major purposes:

A. By regular and periodic meeting and discussion among the heads of these agencies having to do with fiscal and monetary policies, differences of opinion will become less likely to develop. It is so much easier to settle any prospective differences of opinion around a table before they have become fixed in mind or before they have been publicly announced. Such a discussion group would do much to achieve accord before discord arises.

B. The group would act as a top-level advisory group to the President on broad questions of monetary and fiscal policy. It could meet with him for informal discussions, and could report to him preferably on an informal and confidential basis as often as desired.

In other words, as you see, I recommend no drastic changes in order to resolve disputes. I think that they will be resolved as most disputes are if discussion and negotiation are encouraged and facilitated.

C. Expenses for the Purpose of Influencing Public Opinion

11. List and discuss any expenses which have been incurred by the Treasury during the period since 1946 for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and the management of the public debt. Expenses for the preparation of material in standard expository format and for the distribution or presentation of such material in written or oral form to persons who might be expected to have a regular business or professional interest in it may be omitted. Any expenses during this period for the preparation of motion pictures, illustrated brochures, or any other special material in these fields should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the subcommittee may, if it desires, consider them on a case-by-case basis.

In my opinion the Treasury has incurred no expenses since 1946 which could be considered "for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and the management of the public debt." A literal response to your request requires, however, that "Any expenses during this period for the preparation of motion pictures, illustrated brochures, or any other special material in these fields" be included irrespective of whether or not I feel they are controversial. Therefore, I am providing you in the paragraphs that follow with material on the savings bond program and on debt management generally.

1. United States Savings Bonds Division

The United States Savings Bonds Division promotes the sale of savings bonds to the public. In discharging this responsibility, a wide range of advertising and publicity media is used. The costs incurred by the Treasury on this account from July 1946 through June 1951 are listed below. The list is divided into major categories indicative of types of material, and in some instances into subgroups reflecting the market to which directed or the media used to reach the public.

Brochures and Leaflets.—This material directed to the general public or special groups of buyers is distributed through banks; schools; farm and ranch associations; industrial and commercial firms; labor, civic, service, and women's organizations; professional groups; public agencies; and military services. The material is generally supplemented by group or individual solicitations by the distributing agencies and frequently by intensified campaigns and additional material financed by the distributor.

Market	Number of items	Number of pieces	Cost (July 1946–June 1951)
Farm and ranch families	21	63,310,000	$175,850
Bank depositors	17	146,445,000	317,200
Wage and salary earners	31	306,629,000	308,400
Employers	17	3,528,000	21,100
Students and teachers	15	2,885,000	50,150
Other special groups	16	31,178,000	88,750
General public	23	163,935,000	360,800

Displays.—To take advantage of contributed space on billboards, easels, bulletin boards, in public vehicles, store windows, lobbies, and other public places, posters and card displays are distributed to banks, stores, plants, schools, post offices, theaters, transit companies, outdoor advertising agencies, etc. The items are prepared in a variety of sizes to suit specialized needs. The use and display of this material are coordinated by the advertising industry, trade, industrial and banking groups, and similar national organizations.

Market	Number of items	Number of pieces	Cost (July 1946–June 1951)
Farm and ranch families	7	870,000	$22,500
Bank depositors	12	1,150,000	31,500
Payroll savers	16	4,012,000	38,350
Students and teachers	5	305,000	5,200
General public	34	10,321,000	309,000

Newspaper and Magazine Advertising.—The advertising industry makes a substantial contribution in this field in developing material (by the Advertising Council, a voluntary nonprofit group organized to support public service programs) and by contributing space in newspapers, magazines, and trade, business, and farm publications. The expense incurred by the Treasury involves the procurement of material which can be used by the publisher to reproduce the advertisement. In the daily and larger weekly newspapers, this is a paper matrix used to mold the printing plate; many weekly newspapers in small communities are without facilities for casting, and are supplied special metal plates; national magazines, and farm and industrial journals are furnished electrotype plates. Each piece in the listing would have to be multiplied by the circulation of the using publication to arrive at the full distribution of the material. The value to the media can perhaps be best illustrated by the fact that an ad in a national magazine which would cost a commercial advertiser from $750 to $22,400 costs the Treasury less than $10.

User	Number of items	Number of pieces	Cost (July 1946–June 1951)
Newspapers (mats)	340	1,170,000	$270,000
Newspapers (special plates)	65	166,715	151,000
Magazines (electrotype plates)	180	76,980	388,000

Radio and Television.—All broadcasting time devoted to savings bonds promotion is donated. In radio, two types of material are distributed by the Treasury, the "Guest Star" program and the short announcement, both being transcribed. The "Guest Star" is a 15-minute program issued weekly, using the contributed services of a nationally prominent entertainment figure. Organized unions require payment of the announcer and musicians, which added to mechanical production costs will total approximately $2,500 a program or $1 per piece or record distributed to individual stations. These records are used three or four times by each station and reach a relatively high percentage of the Nation's radio audience. Normally, four announcements or commercial records are prepared a year. These records contain ten 1-minute, ten 20-second, and ten 10-second "spot" announcements promoting the sale of bonds.

Television was first used as a medium to promote savings bonds in the fall of 1949. This involves the use of slides and 20-second and 1-minute sound movie shorts. The use of the material is promoted by the advertising, radio, and television industries. Other entirely gratuitous advertisements in the nature of live-spot announcements, special promotion programs, and appeals integrated in regular programs, are frequently used by both radio and television.

Program	Number of items	Number of pieces	Cost (July 1946–June 1951)
Radio, "Guest Star"	260	608,400	$626,000
Radio commercials	20	24,500	36,000
Television shorts	89	10,235	47,750

Motion Pictures.—The costs of talent and production of material used in this medium are contributed by the motion picture industry. The Treasury incurs expense in editing, cutting, and having prints made for distribution. Two technicolor 20-minute sound films and four news trailers have been used. Sufficient prints of the films are made to obtain showings in the Nation's 17,000 theaters. This is accomplished through the motion picture industry. The films are then withdrawn for free use by schools, colleges, professional and business organizations, civic and service clubs, and labor and fraternal groups.

Film	Number of items	Number of pieces	Cost (July 1946–June 1951)
Technicolor	2	997	$48,000
News trailers	4	12,936	49,500

In conclusion, it should be pointed out that by incurring expenses approximating $1.7 million for advertising materials over a 5-year period, the Treasury has received donated newspaper, magazine, and display space and contributed television and radio time conservatively estimated to be worth more than $225 million.

2. Office of the Secretary of the Treasury, Office of the Technical Staff

Over a period of years, I have developed a group of advisory committees who confer with me from time to time on major Treasury financing and debt management problems. These committees include representatives of commercial banking, mutual savings banking, investment banking, and the insurance segments of the financial community. In addition, there are a number of committees concerned primarily with savings bond problems, which include representatives of industry, trade, agriculture, banking, education, labor, and fraternal and service groups.

Prior to meeting with me, these committees meet with members of my technical staff, who describe and discuss with them current Treasury financing problems. The staff uses lantern slides in facilitating the explanation; and the cost of these slides since 1946 has been as follows:

Calendar Year:	Cost	Calendar Year—Continued	Cost
1946	$904	1949	$1,336
1947	1,814	1950	1,528
1948	981	1951	720

The staff's description of the financing problems is considered in the Treasury to be part of an internal briefing operation, and not for the purpose of influencing public opinion in controversial matters. However, because lantern slides have been used, the cost of the slides is included in the answer to this question. The cost of statistical material and charts underlying the slides is not so included because they are accumulated and developed for internal analytical purposes regardless of whether or not slides are prepared.

D. Credit and Debt Management Policy

12. Leaving aside the matter of debt management completely, what are the various powers of the Treasury with regard to monetary matters? Explain the legal background and describe how the Treasury has used these powers.

Congress has given the Secretary of the Treasury considerable powers with regard to monetary matters outside of the field of debt management. Among these powers, two principal functions, (1) the handling of the Nation's gold and silver, and (2) the handling of Treasury cash balances, may have a significant impact on the volume of bank reserves.

A discussion of the economic significance of the Treasury's handling of gold and silver is contained in the answer to Question 13; and a discussion of the part the handling of Treasury deposits plays in monetary matters is the subject of Question 14. (Some historical material on both subjects is also presented in the answer to Question 1.) The answer to the present question provides a summary of the powers related to the operations outlined in the two succeeding answers and, in addition, presents a detailed enumeration of the statutory authority under which the Secretary exercises these powers.

1. General Review

The Treasury is the custodian of the monetary reserves of gold and silver of the United States. It also has authority to regulate the import, export, holding, and use of those metals by private citizens in the United States. The Treasury is responsible for the manufacture and distribution of the Nation's coin and currency. The Treasury is also responsible for the Government's purchases and sales of gold and silver in accordance with Congressional authorizations and directives. The management of the Nation's monetary stocks carries with it the responsibility for actions which may have significant economic effects. Decisions by the Treasury as to how incoming gold is handled, for example, are decisions which have a direct effect upon the volume of bank reserves in the country in that they can provide the commercial banking system a base for about a five- or six-fold expansion of bank credit if appropriate offsetting action is not taken by the Treasury and the Federal Reserve System.

In recent years the effect of purchases of silver on the volume of bank reserves has been relatively unimportant; the Treasury, however, has some discretion as to the extent to which silver certificates are issued.

In the foreign exchange field, the Secretary of the Treasury is the administrator of the Exchange Stabilization Fund, which was created by the Congress for the purpose of stabilizing the exchange value of the dollar. Under the Bretton Woods Agreements Act, the Secretary of the Treasury was designated as Chairman of the National Advisory Council, which coordinates the activities of the United States representatives on the International Monetary Fund and the International Bank for Reconstruction and Development and of all agencies of the Government which make or participate in foreign financial, exchange, or monetary transactions. The Secretary of the Treasury is the United States Governor on the Board of Governors of both the International Monetary Fund and the International Bank for Reconstruction and Development.

The President has also delegated to the Secretary of the Treasury the powers contained in Section 5 (b) of the Trading with the Enemy Act which authorizes the regulation of a wide range of financial transactions under emergency conditions. Furthermore, the Secretary has powers under the Emergency Banking Act of 1933 which may be used subject to the approval of the President in regulation of member banks of the Federal Reserve System, during a period of emergency declared by the President in which the use of these powers is required.

The Treasury also has powers of economic significance in the handling of its deposits of public moneys, both from the standpoint of scheduling the timing of changes in its over-all balance and in the distribution of its balances between the Federal Reserve Banks or its own vaults on the one hand, and commercial bank depositaries on the other. Its actions in both of these areas may have an important effect on bank reserves and on relative tightness or ease in the money market.

The Treasury's decisions on the handling of the monetary stocks and on the handling of deposits are made after consultation with the Federal Reserve System whenever those decisions are likely to affect significantly the expansion or contraction of bank reserves.

A detailed enumeration of the Secretary's powers in these fields follows:

2. Detailed Enumeration

(*a*) *Gold.*—The authority of the Secretary of the Treasury to prescribe the conditions under which gold transactions are permitted to take place is provided by Section 3 of the Gold Reserve Act of 1934 (31 U. S. C. 442) and Executive Order No. 6260 of August 28, 1933. As required by this Act, the Secretary prescribes the conditions under which gold may be acquired, held, transported, melted or treated, imported, exported, or earmarked: (a) for industrial, professional, and artistic use; (b) by the Federal Reserve Banks for the purpose of settling international balances; and (c) for such other purposes as in his judgment are not inconsistent with the purposes of this Act. Pursuant to this statute, the Secretary of the Treasury issued the Gold Regulations which appear in 31 C. F. R. Part 54.

These regulations provide that persons in the United States may, under certain conditions, obtain licenses which authorize them to acquire and deal in gold for legitimate and customary industrial, professional, or artistic use. Provision is also made for limited acquisitions of gold for such purposes without a license and for the dealing in certain types of gold without a license. The export of any gold, other than fully fabricated gold or monetary gold owned by foreign governments and central banks, is permitted only under a license issued by the Director of the Mint when the Director is satisfied that the gold is to be exported for customary industrial, professional, or artistic use and not for use as or in lieu of money.

The Secretary of the Treasury has also licensed the earmarking of gold in the United States for foreign governments, central banks, and international monetary institutions.

The Secretary is authorized, with the approval of the President, to purchase and sell gold at such rates and upon such terms and conditions as he may deem most advantageous to the public interest (Sections 8 and 9 of the Gold Reserve Act; 31 U. S. C. 734, 733). This legal authority is circumscribed, however, by the provisions of the Articles of Agreement of the International Monetary Fund which the United States accepted pursuant to the authorization contained in the Bretton Woods Agreements Act (22 U. S. C. 286). Under Article IV, Section 2, of the Articles of Agreement, the United States may not purchase gold at more or sell gold at less than the par value of the United States dollar plus or minus a margin which the Fund has prescribed to be $\frac{1}{4}$ of 1 percent. The par value of the United States dollar is $15\frac{5}{21}$ grains of gold $\frac{9}{10}$ fine, which is equivalent to a price of $35 a fine ounce. This par value of the United States dollar cannot be changed except upon the request or with the approval of the United States; and Section 5 of the Bretton Woods Agreements Act (22 U. S. C. 286c) provides that neither the President nor any person or agency shall propose any change in the par value of the United States dollar or approve any general change in par values unless Congress by law authorizes such action. All sales and purchases of gold by the United States, both domestic and international, are at its official price of $35 per fine troy ounce (plus or minus $\frac{1}{4}$ of 1 percent and mint charges where applicable), which is in line with the foregoing provisions.

The Treasury sells gold at the official price for the settlement of international balances and other legitimate monetary purposes to foreign governments and central banks. Foreign governments and central banks can exchange dollars for gold virtually automatically for these normal monetary purposes. The United States Treasury also sells gold to persons authorized under the Gold Regulations to acquire gold for industrial, professional, or artistic use.

In addition, the United States stands ready to buy gold from foreign governments and central banks without limitation in amount at the official price. This readiness on the part of the United States to buy and sell gold freely for dollars at the parity price in official international monetary transactions is one of the essential elements of maintaining our present gold bullion standard. The United States also buys imported, newly mined, and scrap gold from persons authorized to hold gold in the form and amount offered.

The authority of the Secretary of the Treasury to issue gold certificates (or gold certificate credits) against gold held by the Treasurer of the United States is contained in the Gold Reserve Act (Sections 6 and 14; 31 U. S. C. 408a, 405b). The Secretary is authorized to issue gold certificates (or credits) against any such gold, except for the gold fund held as a reserve for any United States Notes and Treasury Notes of 1890; and he is also authorized to redeem such certificates (or credits) under certain conditions. The amount of gold certificates (or credits) so issued and outstanding shall not exceed, however, the value at the legal standard of the gold held against such certificates (or credits). Under this authority, gold certificates and credits have been issued only to the Federal Reserve Banks.

(*b*) *Silver.*—It has been the declared policy of the United States Government since 1934 that the proportion of silver to gold in the monetary stocks of the United States should be increased with the ultimate objective of having one-fourth of the monetary value of such stocks in silver (Section 2 of the Silver Purchase Act of 1934; 31 U. S. C. 311a). Whenever it is in the public interest, the Secretary of the Treasury is authorized to purchase silver in line with this ultimate objective (Section 3 of the Silver Purchase Act of 1934; 31 U. S. C. 734a). Significant purchases of silver from abroad were made by the Treasury under this program up until the latter part of 1941. During the last decade, foreign silver has not been obtainable on terms considered by the Secretary to be advantageous to the public interest. As discussed in succeeding paragraphs, however, the Treasury has been required under other legislation to add to its silver monetary stock by acquiring newly mined domestic silver.

The Secretary also has the authority, with the approval of the President, to sell silver whenever the stock of silver is greater than one-fourth of the monetary value of the stock of gold and silver, or whenever the market price of silver exceeds its monetary value (Sec. 4 of the Silver Purchase Act of 1934; 31 U. S. C. 734b). Since the enactment of the Silver Purchase Act, neither of these conditions has ever been met, however, so no sales of silver have been made under this authority. The Secretary of the Treasury also has authority to sell silver (not otherwise obligated) for manufacturing uses at not less than 90.5 cents a fine ounce (Act of July 31, 1946; 31 U. S. C. 316d).

The Secretary of the Treasury also has the authority to regulate the acquisition, importation, exportation, and transportation of silver (Sec. 6 of the Silver Purchase Act of 1934; 31 U. S. C. 316b).

Newly mined domestic silver is acquired by the Treasury under the Acts of July 6, 1939 (31 U. S. C. 316c), and July 31, 1946 (31 U. S. C. 316d). United States mints are required by these statutes to receive any silver mined subsequent to July 1, 1939, from natural deposits in the United States. Until July 1, 1946, the law authorized the mints to retain 45 percent of the monetary value ($1.29) of such silver as seigniorage so that the return to the person bringing the silver to the mint amounted to 71.11 cents a fine ounce. Since July 1, 1946, however, the seigniorage deduction has been only 30 percent, so that the return to the depositor is currently 90.5 cents a fine ounce. The United States mints have accepted all newly mined domestic silver meeting statutory requirements which has been offered to them. The Treasury is required by law (the Silver Purchase Act and the Acts of July 6, 1939, and July 31, 1946) to monetize silver to the extent necessary to pay the person offering it to the Government.

The President is authorized to issue silver certificates against any silver in the Treasury which is not already held for redemption of outstanding silver certificates (Sec. 12 of the Gold Reserve Act of 1934; 31 U. S. C. 821). From time to time, additional amounts of silver have been monetized by order of the President under this authority.

(*c*) *Stabilization.*—The stabilization powers of the Secretary of the Treasury authorize him, with the approval of the President, to deal in gold and foreign exchange for the account of the Exchange Stabilization Fund for the purpose of stabilizing the exchange value of the dollar (Sec. 10 of the Gold Reserve Act; 31 U. S. C. 822a). The Exchange Stabilization Fund originally amounted to $2 billion, of which $1.8 billion was ultimately used to pay part of the United States subscription to the International Monetary Fund as authorized by the Bretton Woods Agreements Act. At the present time, the Exchange Stabilization Fund consists of $200 million of original capital plus an increment of approximately $110 million derived from operations.

The exchange stability of the dollar has been maintained primarily through the purchase and sale of gold between the United States Treasury and other governments and central banks at the parity price of gold, as described above.

The Secretary of the Treasury has from time to time entered into stabilization agreements with foreign governments. At the present time, such stabilization agreements as are made supplement the efforts of the International Monetary Fund.

(*d*) *Financial Controls.*—The President has delegated to the Secretary of the Treasury the broad power to regulate financial transactions as set forth in Section 5 (b) of the Trading with the Enemy Act (12 U. S. C. 95a). Under this authority the Secretary regulated the transaction of business by banks during the banking emergency of 1933; blocked the assets of enemy countries, overrun countries and a number of neutral countries—and their nationals—during World War II; and on December 17, 1950, blocked all assets of Communist China and North Korea and their nationals.

In addition, Section 4 of the Emergency Banking Act of 1933 (12 U. S. C. 95) provides that during such emergency as the President by proclamation may prescribe, no member bank of the Federal Reserve System shall transact any banking business except to such extent and subject to such regulations as may be prescribed by the Secretary of the Treasury with the approval of the President. This authority, along with that of the Trading with the Enemy Act mentioned above, was used to regulate the transaction of business by member banks during the banking emergency of 1933.

(e) *Designation of Depositaries and Deposit of Public Moneys.*—The Secretary of the Treasury may designate any bank insured by the Federal Deposit Insurance Corporation as a depositary of public money of the United States (Sec. 10 of the Act of June 11, 1942; 12 U. S. C. 265). After a depositary has been so designated, the Secretary of the Treasury is further authorized to deposit public money in the depositary under such regulations as he may prescribe.

Furthermore, the Secretary of the Treasury may, if he wishes, deposit certain receipts of the Treasury in such incorporated banks and trust companies as he may designate (Sec. 8 of the Second Liberty Bond Act, as amended; 31 U. S. C. Supp. IV, 771). Receipts which may be handled in this way comprise proceeds arising from the sale of public debt obligations and amounts arising from the payment of internal revenue taxes.

Moneys in the General Fund of the Treasury may also be deposited by the Secretary of the Treasury in Federal Reserve Banks (Sec. 15 of the Federal Reserve Act, as amended; 12 U. S. C. 391). Federal Reserve Banks and incorporated banks or trust companies which are depositaries or financial agents of the United States are permitted under the Internal Revenue Code, if the Secretary so authorizes, to receive any tax under conditions which he may prescribe (Sec. 3310 (f) (2) of the Internal Revenue Code, as amended; 26 U. S. C. Supp. IV, 3310 (f) (2)).

The Secretary of the Treasury also has the authority to designate depositaries of public money in foreign countries and in the Territories and insular possessions of the United States whenever that may be necessary for the transaction of the Government's business (Act of June 19, 1922; 31 U. S. C. 473).

13. Describe the Treasury's functions with respect to the handling of incoming gold and silver, and how bank reserves are affected. Explain how the Treasury may permit gold to be "sterilized."

The Treasury has a number of functions with respect to the handling of gold and silver which have a direct impact on the volume of bank reserves. The Treasury's major statutory powers with reference to both gold and silver have been described in the answer to Question 12. The answer to the present question is principally devoted to a discussion of the mechanics of the Treasury's gold and silver transactions and their economic significance.

1. Gold Reserves

In 1933 and 1934 a number of steps were taken whereby gold coin and gold bullion, with certain exceptions, and gold certificates held in the United States were required to be turned into the Treasury. In the case of gold held by the general public, payment was made in United States dollars. In the case of gold held by the Federal Reserve Banks, the Treasury issued an equivalent amount of gold certificates (or gold certificate credits) to them.

The Treasury pays for new acquisitions of gold by check drawn on its account with a Federal Reserve Bank. The Treasury may then replenish its account at the Federal Reserve Bank by the issuance of gold certificates or gold certificate credits against the amount of gold so purchased. (As a matter of convenience, the Treasury issues gold certificate credits rather than printing and delivering gold certificates.) The Treasury must hold gold at the rate of $35 a fine ounce for all gold certificates and gold certificate credits outstanding. Consequently, while the Government has title to all monetary gold of the United States, the greater part of it is held as a reserve for the gold certificates and the gold certificate credits in the possession of the Federal Reserve Banks, and gold so held may not be used for any other purpose. Except for a small amount of gold certificates issued prior to 1934 that have not been turned in, some of which may have been lost, destroyed, or sent abroad, the only gold certificates now outstanding are held by the Federal Reserve Banks.

The process by which gold produced in the United States or imported from abroad reaches the Treasury and is reflected in additions to the reserves of member banks and Federal Reserve Banks, is as follows: The gold is taken to any mint or assay office of the United States Treasury, which pays for it by check drawn on the account of the Treasurer of the United States in the Federal Reserve Bank. In most cases the proceeds are eventually deposited in a commercial bank in the United States. Thereby the reserve balances of the commercial bank are increased. At this point, the commercial banking system has enlarged both its assets (reserve balances) and liabilities (deposits) by the amount of the gold purchased by the Treasury; the Federal Reserve System has simply shifted deposits on its books from the Treasurer to a commercial bank.

Up to this point the Treasury's purchase of gold has had no monetary effect different from that of its purchases of other goods and services. If nothing else were done, the addition to the reserves of the commercial banks would be temporary; the commercial banks would lose this addition to their reserves when the Treasury restored its balance at the Federal Reserve by tax collections or the sale of securities, for the amounts paid to the Treasury by the public in these ways would be drawn from the commercial banks. But when the Treasury purchases gold, it does not need to obtain funds from the public and the commercial banks to restore its balances at the Federal Reserve Banks. Instead, it usually replenishes its balances with the Federal Reserve Banks by issuing to them an amount of gold certificate credits equal to the value of the gold purchased. The result is that the Treasury's balances at the Federal Reserve Banks are as large as they were before the purchase of gold, while the reserves of the commercial banks and the reserves of the Federal Reserve Banks are each increased by the amount of the gold purchased.

The amount of gold used annually in the United States for industry and the arts exceeds by a considerable margin the current annual total of United States gold production. Accordingly, Treasury purchases of newly mined domestic gold do not, in effect, increase the total of commercial bank reserves; on the contrary, net industrial, professional, and artistic purchases of gold from the Treasury annually causes some reduction in commercial bank reserves.

It should be mentioned in this connection that gold movements in and out of the United States in recent years (other than gold refined in the United States from foreign ores) have been handled almost exclusively by governments and central banks, so that gold transactions proceed through official channels. Sometimes gold transactions with foreign countries take place without a physical movement of gold into or out of this country. A foreign central bank may purchase gold from the United States and have it "earmarked" or segregated for its account at the Federal Reserve Bank of New York. Later, it may resell some of its "earmarked" gold to the United States Treasury. "Earmarked" gold belongs to foreign authorities and is not a part of the monetary gold stock of the United States.

As indicated above, when financed by the issue of gold certificates, the amount paid for gold purchases normally operates to increase the reserve balances of commercial banks. Such additional reserves furnish the commercial banking system a base for about a five- or six-fold expansion of bank credit.

If the Treasury or the Federal Reserve wishes, however, to prevent this multiple expansion in lending power from taking place, there are four direct courses of action which may be feasible. The Federal Reserve has two alternatives. It can move in the direction of reducing excess reserves by (a) selling securities in the open market, or (b) raising reserve requirements if they are not yet at their legal maximum. The Treasury also has two alternatives. It can (a) increase the Treasury's balance in the Federal Reserve Banks to a higher level than previously, by transferring funds from commercial banks to the Reserve Banks, or (b) "sterilize" gold; that is, purchase gold without issuing gold certificates to recoup the purchase price but instead, in effect, use tax receipts or borrowed funds transferred from the commercial banks to maintain the level of the Treasury's balances at the Reserve Banks.

2. Gold Sterilization

On December 24, 1936, the Treasury inaugurated a program of "sterilizing" incoming gold in order to keep it from enlarging bank reserves. This procedure was very simple; it differed from the ordinary procedure for paying for gold as described above in this answer in one important way. That is, the Treasury did not issue gold certificates or gold certificate credits to reimburse its accounts at the Federal Reserve Banks. Instead, the Treasury replenished its funds with the Federal Reserve by drawing funds from the market, either by selling securities or by making calls on Treasury balances at commercial banks. These funds were used, in effect, to pay for the gold, and the Treasury continued to hold the gold as an asset in an inactive account.

In the recession of 1937, some of the sterilized gold was released (i. e., gold certificates were paid out by the Treasury to the Federal Reserve) as a counter-deflationary measure.

On April 14, 1938, the gold sterilization program was terminated and approximately $1,391 million which had accumulated was credited to the Treasurer's deposit account with the Federal Reserve Banks through the issuance of gold certificates or gold certificate credits. As the funds so credited were paid out by the Treasury, bank reserves were increased accordingly.

The sterilization program was worked out after consultation between the Secretary of the Treasury and the Board of Governors of the Federal Reserve System and was undertaken in conjunction with certain actions by the Board to reduce the volume of excess reserves. Notwithstanding the gold sterilization program, the banking system retained a substantial amount of excess reserves throughout the period of the inactive gold account even though there was a considerable reduction in the amount of excess reserves in the period.

The Treasury still has authority to hold gold inactive in the General Fund. In fact, approximately $1 billion in the Treasury's General Fund balance is being held in the form of inactive gold at the present time.

3. Silver

The Treasury is the custodian of the Nation's monetary reserves held in the form of silver.

Under the Acts of July 6, 1939, and July 31, 1946, domestic silver mined since July 1, 1946, may be delivered, at the owner's option, to United States mints for a return of 90.5 cents an ounce. The Treasury has no discretion under this legislative provision. Since this price has generally been higher than the open-market price, the effect of this provision has been to divert to the United States Treasury at the 90.5-cent price substantially all of the current production of silver in the United States.

When the Treasury acquires an ounce of domestically mined silver at 90.5 cents an ounce, it issues silver certificates against such silver on the basis of $1.29+ an ounce, to the extent of the cost of the silver. These additions to the amount of silver certificates serve to increase the supply of money, bank deposits, and commercial bank reserves; but, unlike gold certificates, they are not eligible to satisfy the legal reserve requirements of the Federal Reserve Banks. In recent years the effect of silver purchases on bank reserves has been relatively insignificant because of the small volume of such purchases.

14. Describe fully how the handling of Treasury deposits influences the monetary situation.

The flow of cash in and out of the Treasury has an important influence on the Nation's monetary situation. The Treasury may exercise some control over this flow of cash by the manner in which it handles its deposits in banking institutions. The Treasury may tighten bank reserves and the money market by building up its balances with the Federal Reserve Banks and drawing down its accounts in commercial banks. Conversely, it may make bank reserves more plentiful if it increases its commercial bank balances and draws down balances with the Federal Reserve.

The main objective of Treasury deposit policy is to smooth out the effects of seasonal or other fluctuations in Treasury cash receipts and disbursements so as to avoid any undesirable effects on the reserves of the banking system or on Federal Reserve operations. On occasion, Treasury deposits also are used with the longer-run objective of tightening bank reserves in periods of inflationary pressure and easing them when the situation is reversed. Treasury awareness of the economic significance of the handling of its deposits has been evident from the very beginning of the Government, as is discussed in the answer to Question 1, and this function has become more important as Federal Government financial operations have grown in size and complexity.

The full answer to this question falls into two parts: (1) a description of Treasury deposits and the effect of the flow of Treasury cash receipts and disbursements on them, and (2) a discussion of the role played by Treasury deposit policy in modifying the impact of Treasury transactions in tightening or easing bank reserves, as the occasion demands.

1. Description of Treasury Deposits

The Treasury's commercial bank balances are in the form of tax and loan accounts (formerly called war loan accounts) in commercial banks which have been designated as special depositaries. Funds flowing into these Treasury tax and loan accounts include a large part of the proceeds of withheld individual income and payroll taxes and the proceeds of most sales of savings bonds and savings notes and other public debt obligations issued for cash (except regular issues of Treasury bills); in addition, the Treasury inaugurated in March 1951 a new procedure whereby all or a substantial part of quarterly income tax payments over $10,000 flow directly to the tax and loan accounts. The Treasury does not draw on tax and loan accounts directly for disbursements. Whenever the funds are needed they are transferred to Treasury deposit accounts with the Federal Reserve Banks through "calls" of varying amounts from time to time.

The effective working cash at the Treasury, then, is held in the form of deposits with the Federal Reserve Banks. All Treasury cash receipts, except those mentioned above, flow to the Federal Reserve Banks; and these funds, together with funds called from tax and loan accounts, provide the balance against which Treasury cash disbursements are drawn.

In addition to its deposits in tax and loan accounts and its deposits with Federal Reserve Banks, the Treasury also carries balances with other domestic bank depositaries and foreign depositaries in order to provide the Treasury with banking facilities at some distance from any of the Federal Reserve Banks or their branches. The Treasury also holds approximately $1 billion of inactive gold and smaller amounts of inactive silver, currency, and minor coin. These are all reflected in the Treasury's General Fund balance. At the present time, however, the primary movements in Treasury deposits are in the tax and loan accounts and in the Treasury balances with the Federal Reserve Banks.

When taxpayers' checks drawn on the commercial banking system are deposited in the Treasury's accounts at the Federal Reserve Banks, there is an equivalent drain on member bank reserves, since the member banks pay the checks by drawing the amounts from their reserve balances held in the Federal Reserve Banks. A heavy concentration of tax payments flowing directly into the Reserve Banks would, therefore, result in severe and sudden tightness in the money market as banks attempt to obtain funds to replenish their reserves. This tight situation, unless offset by special Federal Reserve operations, would normally ease only gradually as the Treasury spent its tax receipts over a period of time. The desirability of easing the impact of the flow of seasonally high tax receipts on the banking system and the money market provides the basic need for an important phase of Treasury deposit policy.

2. The Execution of Treasury Deposit Policy

The Treasury policy of minimizing the effects of seasonal or other fluctuations in cash receipts and disbursements on bank reserves, on Federal Reserve operations, and on the money market is made effective in three principal ways: (1) handling the major share of the concentration in tax receipts through commercial banks rather than through Federal Reserve Banks, (2) permitting Treasury balances with the Federal Reserve to decline to a minimum immediately prior to the tax collection peaks, and, on occasion, selling very short-term securities directly to the Federal Reserve System in anticipation of heavy tax receipts to cover what would otherwise amount to a temporary overdraft in the Treasury's balance with the Federal Reserve Banks, and (3) the designing of public debt securities which will fall due on tax dates.

In the first instance, the Treasury contributes effectively toward the elmination of large changes in the volume of bank reserves resulting from Treasury operations by handling the large bulk of its seasonal tax receipts through the tax and loan accounts in commercial banks rather than directly through the Federal Reserve.

In March 1951, the Treasury adopted a new procedure for handling large tax checks as the seasonal pattern of tax receipts became even more concentrated. The situation was particularly acute in 1951 with regard to the handling of corporate tax receipts, since corporate tax payments were at a new high because of record profits, higher income and excess profits tax rates, and the speedup of corporate tax payments under the Revenue Act of 1950. It seemed desirable that the Treasury take special precautions to avoid unnecessary bank reserve tightening at a time when these large corporate taxes were being paid. The Treasury made arrangements, therefore, to redeposit in the same banks amounts equivalent to the checks of $10,000 or more which are drawn on those banks for payment of income and profits taxes by their individual or corporate depositors. As a result, these particular tax payments have no immediate impact on bank reserves, since the commercial bank involved simply transfers funds from the taxpayer's account to the Treasury's account.

Deposits arising from this source are classified separately from deposits in tax and loan accounts arising from other sources, and are identified as "X" balances in tax and loan accounts. The funds thus built up are withdrawn as needed by the Government and generally are depleted more rapidly than amounts of credits from other sources in tax and loan accounts.

This manner of operating is also intended to equalize the benefits of the tax and loan account device as between banks in money market centers as compared with banks in other parts of the country. On June 30, 1951, for example, 45 percent of all "X" balances were in the New York Federal Reserve District, compared to only 25 percent of balances in regular tax and loan accounts.

These "X" balances are in addition to the two regular classes of tax and loan accounts which provide for the handling of all of the rest of the money flowing into the Treasury accounts in special depositaries. These other two groups are classified between those depositaries with a balance of $100,000 or less (Group A) and those banks with larger balances (Group B). The Treasury may call for funds from individual banks without regard to classification, but has done so only on rare occasions when special circumstances were involved. All tax and loan account balances are payable to the Treasury on demand, but the Treasury does give the depositary several days' notice in calling specified amounts for payment.

The second way in which the Treasury works toward minimizing the impact of its operations on bank reserves during concentrated tax payment periods is to let its balances at the Federal Reserve Banks run down close to zero just before tax receipts begin to flow in. Temporarily the reserve position of banks is eased in this way and the action is promptly offset as tax receipts increase the Treasury balances at the Federal Reserve Banks. On some occasions, this depletion of balances at the Federal Reserve Banks is accompanied by temporary borrowing by the Treasury to make the use of this device even more effective. Temporary borrowing of this nature—usually only for a few days at a time—is done under authority granted the Federal Reserve System to purchase and hold at any one time up to $5 billion of securities from the Treasury. This authority was obtained under Title IV of the Second War Powers Act of 1942 and was extended by Congress on June 30, 1950, for an additional 2 years. Although this technique was used regularly during the 1920's (under somewhat similar authority in effect until 1935) and during World War II, it has been used less frequently during the past few years. It does represent, however, an essential fiscal mechanism for the Treasury in handling the distribution and utilization of its cash balances.

The third way in which the Treasury seeks to minimize the sharp effects of seasonal tax collection peaks on the money market is by encouraging investment by corporations of their tax reserves in Federal securities which mature on a tax payment date or which are easily redeemable in payment of taxes. In this manner, the Treasury, in effect, does a certain amount of its borrowing specifically in anticipation of tax receipts. Two special series of Treasury bills (Tax Anticipation Series) were sold in October and November of 1951 with this purpose in mind. The first issue of these bills matures March 15, 1952; and the second, June 15, 1952. The Treasury also offers savings notes in nonmarketable form, which are used extensively by corporations for the investment of their tax reserves.

Treasury exercise of its deposit functions also extends beyond the seasonal adjustment problem; and, on occasion, effective use of Treasury deposits may contribute toward a calculated easing or tightening of bank reserves when prevailing business conditions require such action.

In cooperation with the Federal Reserve System in 1948, for example, the Treasury built up its account at the Reserve Banks very considerably in order to assist in the restraint of inflationary pressures. In 1949, these deposits were allowed to run down again as inflationary pressures subsided. The Treasury's ability to adjust its deposits in this way, however, is of necessity rather limited. Typically, the Treasury balance with the Federal Reserve is maintained at a rather constant level, not far above a prudent operating minimum which is adequate to cover expected daily cash needs and to provide for a proper regional distribution of balances.

15. In making decisions with regard to these Treasury monetary matters (gold, silver, and handling of its deposits), has the Treasury attempted to coordinate its policies with those of the Federal Reserve System?

The Treasury keeps in constant touch with the Federal Reserve System on Treasury monetary matters concerning gold, silver, and the handling of its deposits. Major policy decisions are made by the Secretary of the Treasury after consultation with the Board of Governors of the Federal Reserve System. In carrying out such policies, the working staffs of the Treasury and the Federal Reserve System keep in contact with frequent exchanges of views and information. Most of the operations in this area, of course, are carried out through the Federal Reserve Banks acting as fiscal agents of the United States.

16. Review the development of legislative authority on public debt matters over the years.

The earliest of all public debt statutes (the Act of August 4, 1790, 1 Stat. 138), which provided for the payment of the foreign debt and the funding of the domestic debt existing at the inception of the new Government as well as the assumption of the debts of the several states, authorized the President to borrow money on the credit of the United States for those purposes. The authority of the President was delegated by him to the then Secretary of the Treasury, Alexander Hamilton. This pattern of responsibility continued in general until the Civil War period when the Acts of July 17 and August 5, 1861 (12 Stat. 259, 313), without reference to the President, authorized the Secretary of the Treasury to borrow money for financing the Civil War through the issuance of bonds, 1-year notes and demand notes.

From the close of the Civil War period until our entrance into World War I, there were enacted numerous acts authorizing the Secretary of the Treasury to borrow upon the credit of the United States. Beginning with the First Liberty Bond Act (40 Stat. 35) and continuing until the present time, the borrowing authority vested in the Secretary has been subject to approval by the President in respect to the issuance of bonds and notes. Existing law (31 U. S. C. 754b) provides that the decision of the Secretary of the Treasury in respect to the terms and conditions of any bonds, notes, bills or certificates of indebtedness which he may issue shall be final.

It may be stated that prior to World War I, the Acts of Congress authorizing the issuance of public debt obligations usually specified the terms and conditions which were to attach to such obligations and vested but little discretion in the Secretary of the Treasury. As a typical example, there may be cited Sections 32 and 33 of the Act of June 13, 1898 (30 Stat. 466), which authorized the Secretary of the Treasury to issue certificates of indebtedness and bonds to finance the war with Spain.

In authorizing the borrowings incidental to the participation of the United States in World War I, the Congress departed from its previous policy of specifying the terms and conditions of the obligations to be issued. The First, Second, Third, and Fourth Liberty Bond Acts (40 Stat. 35, 288, 502, 844) and the Victory Liberty Loan Act (40 Stat. 1309), with the exception of certain maximum rates of interest which were prescribed by the Congress, gave the Secretary of the Treasury broad authority to determine the terms and conditions of issue, conversion, redemption, maturities, payment, and the rate and time of payment of interest in respect to the several classes of obligations authorized to be issued.

The basic authority for the issuance of securities of the United States is now contained in the Second Liberty Bond Act, as amended. Section 1 of that Act (31 U. S. C. 752) authorizes the Secretary of the Treasury, with the approval of the President, to issue bonds "in such form or forms and denomination or denominations and subject to such terms and conditions of issue, conversion, redemption, maturities, payment, and rate or rates of interest, not exceeding 4¼ per centum per annum, and time or times of payment of interest, as the Secretary of the Treasury from time to time at or before the issue thereof may prescribe." Other provisions of the amended Act vest comparable authority in the Secretary of the Treasury in respect to the issuance of bills, notes, certificates of indebtedness, and savings bonds, except that the issuance of bills and certificates of indebtedness does not require Presidential approval.

From time to time, the Congress has broadened the powers of the Secretary of the Treasury in respect to the conduct of public debt operations by authorizing him to issue new types of public debt obligations. By an amendment to the Second Liberty Bond Act, approved June 17, 1929 (31 U. S. C. 754), the Secretary of the Treasury was authorized to issue Treasury bills on a discount basis with maturities not in excess of 1 year.

A further amendment to that Act, approved February 4, 1935, and broadened by the Public Debt Act of 1941 (31 U. S. C. 757c), authorized the Secretary of the Treasury to issue United States savings bonds on a discount basis, on a current interest income basis, or on a combination of the two. These securities may be issued with a maturity of not more than 20 years and an investment yield of not more than 3 percent per annum, compounded semi-annually. These are now issued continuously in three series, all of which are nontransferable and subject to a limitation on holdings: Series E, a 10-year discount bond with an investment yield of 2.9 percent per annum compounded semi-annually if held to maturity (ownership restricted to individuals in their own right); Series F, a 12-year discount bond with an investment yield of 2.53 percent per annum compounded semi-annually if held to maturity; and Series G, a 12-year current income bond, with an investment yield of 2.5 percent per annum if held to maturity. The last two series may be owned by organizations and fiduciaries as well as individuals.

The Congress, by an Act approved March 26, 1951, Public Law 12, 82d Congress, granted additional authority to the Secretary of the Treasury in the conduct of public debt operations by amending section 22 of the Second Liberty Bond Act (31 U. S. C. 757c (b)) to authorize the Secretary of the Treasury, with the approval of the President, to provide by regulation that owners of Series E savings bonds thereafter maturing may, at their option, retain the matured bonds and earn interest upon the maturity values thereof for not more than 10 years.

Under the general authority granted by the Second Liberty Bond Act, as amended, the Secretary of the Treasury has from time to time issued a number of other new classes of obligations. The Secretary has within recent years offered two series of nonmarketable Treasury bonds: Investment Series A, issued in 1947, similar in some respects to savings bonds of Series G except that they were not on continuous sale, had an 18-year maturity and were restricted in ownership to specified classes of institutional investors; and Investment Series B, offered in 1951 only in exchange for 2½ percent Treasury bonds of June and December 1967–72, and not redeemable prior to call or maturity but exchangeable at any time for marketable 1½ percent, 5-year Treasury notes. Special issues to Government agencies and trust funds are also issued under this same general authority.

There are also currently issued two classes of Treasury obligations designed primarily for use in direct payment of taxes: Treasury savings notes, a 3-year nontransferable note issued continuously, bearing interest payable on redemption and redeemable prior to maturity; and marketable Treasury bills, Tax Anticipation Series, which mature on specified tax payment dates.

Prior to the Act of July 20, 1939 (53 Stat. 1071), there was a specific limit for the total amount of bonds and various specific limits for the amounts of Treasury notes, certificates of indebtedness, and Treasury bills which could be outstanding under the Second Liberty Bond Act, as amended. The Act of July 20, 1939, removed these specific limitations and subjected the aggregate amount of all obligations which might be outstanding under the Second Liberty Bond Act, as amended, to a general public debt limitation, then placed at $45 billion. In addition, four billion dollars of National Defense Series obligations redeemable from a special fund were subsequently authorized to be outstanding under an amendment to the Second Liberty Bond Act added by the First Revenue Act of 1940 but repealed on February 19, 1941, when the general limitation was raised to $65 billion.

The public debt limitation was raised under subsequent acts; a high of $300 billion was reached in the Act of April 3, 1945, but the limit was lowered again to $275 billion on June 26, 1946.

The present public debt limitation of $275 billion applies to the current redemption value of savings bonds and the face amount of other outstanding obligations issued under the authority of the Second Liberty Bond Act, as amended, and to the face amount of all guaranteed obligations. (The amount of guaranteed obligations is now relatively small—$42 million as of December 31, 1951.)

As of December 31, 1951, there were outstanding $258,794,016,730 in obligations subject to the limitation. It is obvious, of course, that the size of the public debt is not determined by the public debt limitation but rather by the relationship of the expenditures authorized by the Congress to the receipts derived from internal revenue and other sources.

Prior to the enactment of the First Liberty Bond Act, approved April 24, 1917, acts authorizing the issuance of United States securities provided in substance that the securities issued should be exempt, both as to principal and interest, from any taxation by the United States or any of its possessions, or by any State, municipal or local taxing authority. When the First Liberty Bond Act was enacted, followed shortly by the Second Liberty Bond Act of September 24, 1917, some changes were made in the language governing tax exemptions;

and estate and inheritance taxes, whether Federal or State, were expressly made an exception. The Second Liberty Bond Act exemption language was somewhat broadened to include in the exception from exemption not only estate and inheritance taxes, but also graduated additional income taxes commonly known as surtaxes, and excess-profits and war-profits taxes imposed by the United States. This applied to bonds, certificates of indebtedness and bills. Treasury notes, however, could be issued with any one of four exemptions, none of which was broader than the exemptions found in the Second Liberty Bond Act regarding bonds and certificates.

These tax exemption provisions continued until the Public Debt Act of 1941 which made all obligations of the United States issued on or after March 1, 1941, (with very minor exceptions)[3] subject to all taxation under the Federal tax acts then or thereafter in force. This is the present law.

No discussion of legislative authority relating to the public debt would be complete without reference to the sinking fund. Congress has provided a number of different sinking fund arrangements to assist in the process of debt retirement since the first statutes including such provisions were passed in 1790 (1 Stat. 138; 1 Stat. 186). The present sinking fund provisions (31 U. S. C. 767, 767a, and 767b) grow out of the Victory Loan Act approved March 3, 1919, and provide for an annual appropriation to the cumulative sinking fund. The sinking fund is essentially a mechanical device to provide a basic framework for orderly debt retirement. Its effectiveness, of course—like the effectiveness of the statutory debt limitation—depends, in the final analysis, on whether the Federal Government is operating at a surplus of budget revenues over expenditures. This is the only way debt reduction—either with or without a sinking fund—can take place.

The Secretary of the Treasury, in addition to any authorization contained in sinking fund legislation, is also authorized at his discretion to use surplus moneys for the purchase or redemption of the public debt. Such authority is contained in the Act of March 3, 1881 (31 U. S. C. 741), which authorizes the Secretary of the Treasury to apply any surplus money in the Treasury to the purchase or redemption of United States bonds subject to the proviso that any bonds so purchased shall not constitute a part of the sinking fund but shall be canceled. In addition, broad authority is granted to the Secretary of the Treasury by Section 19 of the Second Liberty Bond Act, as amended (31 U. S. C. 754a), to issue obligations thereunder for the purchase, redemption or refunding of any outstanding obligations of the United States, and to use any money received from the sale of such obligations, or any other money in the general fund of the Treasury, for such purposes.

17. Describe fully the issues involved in policy discussions between the Treasury and the Federal Reserve System from the end of the war until the "accord" announced by these agencies on March 4, 1951. What were the areas of agreement and the areas of disagreement and how did they change over time during this period?

I should like to make it clear at the outset that, in attempting to answer this question fully, I have been very frank in discussing the

[3] Obligations which the U. S. Maritime Commission or the Federal Housing Administration had contracted prior to March 1, 1941, to issue at a future date.

points of difference which arose between the Treasury and the Federal Reserve. Yet I would not want the Committee to gain the impression that the two agencies were not sympathetic to each other's problems. The record should be considered in the light of the difficulties of the problems which had to be dealt with in this period.

Moreover, the record should be considered in the light of the large degree of agreement which has always existed between the Treasury and the Federal Reserve. Particularly, during the postwar period, the two agencies were agreed upon the over-all objective of maintaining a high level of production, employment, and income with as great price stability as possible under the varying conditions which existed in the economy. This was, of course, also the over-all objective of the country generally.

The Treasury and the Federal Reserve were agreed also as to the related objectives which were involved. We agreed that the reconversion of the Nation's economy from war to peace should be expedited. We agreed that it was desirable to maintain confidence in the credit of the Government of the United States. We agreed that it was necessary to maintain a sound market for the securities of the United States Government. We agreed that it was desirable during much of the period to restrain over-all credit expansion. We agreed that it was desirable to increase the ownership of Government securities by nonbank investors and to reduce the holdings of the banking system. We agreed that rigidly fixed interest rates were undesirable and that adjustments should be made in the wartime pattern of rates from time to time as this became appropriate.

We agreed on the desirability of a number of specific programs to achieve our objectives. We were, for example, agreed upon the usefulness of a debt reduction program concentrated on the holdings of the commercial banking system. Both agencies were in favor of encouraging saving throughout the economy. We were in agreement that, when the occasion called for them, selective credit controls and other selective restraints were useful in dealing with inflationary pressures.

We agreed on many matters. On some occasions, however, we disagreed on how our objectives were to be achieved. Our differences were primarily on matters of emphasis, in selection of instruments and methods to be employed, and in timing. These were matters of judgment—and judgments, of course, will differ. But, on the whole, the degree of cooperation between the two agencies was very high. Most of the differences were worked out in a genuine spirit of give-and-take; and we worked closely with each other to find programs acceptable to both agencies.

The Treasury was cautious throughout the postwar period. In the early part of the period, the situation was one which required extreme caution since at any time the dislocations accompanying the decline in military output might have proved serious.

It was not only in the early postwar period, however, that caution was required. There were many occasions when the country felt uncertain about the economic future. There were recurring waves of pessimism throughout the entire postwar period—particularly among businessmen. Year after year, there were forecasts that the postwar prosperity was at an end and that recession was about to set in. This pessimism occurred in 1946; it occurred in 1947; in 1948; and again—most seriously—in 1949. Every year, as segments of the economy completed reconversion, there were some who felt that the high level of employment and production must surely fall back; and on each occasion, businessmen in certain sectors of the economy took actions designed to protect themselves against the recession which they felt must be inevitable. This was not surprising. A severe postwar depression had occurred after every other major war in the history of our country. The question was: Did we, as a Nation, have the wisdom to prevent it from happening again?

It was in these circumstances that the Treasury and the Federal Reserve tried to work out programs which would achieve our over-all objective. The answer to this question discusses our activities in considerable detail. For convenience, the answer has been divided into five periods of time: July 1945 through December 1946; January through October 1947; November 1947 through December 1948; January 1949 through June 1950; and July 1950 to March 4, 1951. These are discussed in the framework of the broad economic and financial considerations of each period.

1. July 1945 through December 1946

The most important economic question that confronted the country as the war ended was how to expedite the reconversion process and maintain a high level of employment and production. This was no minor problem. At the close of the war, about 40 percent of the total product of the Nation was going for war purposes, which meant that a sizable part of the productive facilities of the Nation had to be shifted to peacetime production. Over 10 million of our men in the armed forces were to be demobilized in the first year after VJ-day, and an equivalent or even greater number of workers with war production jobs also had to be absorbed into the peacetime economy. In the change-over, unemployment could well become widespread and of serious proportions—a deflationary force of some importance.

On the other hand, shortages of particular types of goods would be prevalent throughout the country at a time when consumers and businessmen had a large volume of easily available purchasing power in the form of accumulated currency, bank deposits, savings accounts, and Government securities. For individuals—and this includes unincorporated businesses and trust funds—the total of liquid asset holdings was $180 billion at the end of 1945; for corporations, it was $45 billion. This was an inflationary potential that had to be taken into account.

Both of these elements in the situation—the possibility of a downswing resulting from the dislocations of the change-over process and the possibility that unhealthy inflationary pressures might develop—had to be given consideration. The main question was: In this situation, what measures would best expedite the reconversion process? The record shows that at the Treasury there was full awareness that all of its actions must be fitted into the framework of facilitating the reconversion effort.

I was not at the Treasury until June 1946, but the then Secretary of the Treasury and I, as Director of War Mobilization and Reconversion, were in agreement on the nature of the problems facing the country in the reconversion period. We worked for swift termination of war contracts and their prompt payment; where the amounts involved were in dispute or could not be determined precisely, the Treasury made immediate partial payment. We encouraged the maximum use of reconversion credit financing procedures. We felt that wartime taxes that might hinder reconversion, such as the excess profits tax, should be eliminated from the peacetime tax structure. We urged the elimination of such wartime taxes as the Victory tax which would hinder consumption and trade in the mass markets of the country. In the financial markets, we wanted stability. All of this, we felt, was necessary in order to give both businessmen and investors the incentives and sufficient confidence in the future to undertake programs which would expedite the main job at hand—the conversion to a high-level peacetime economy.

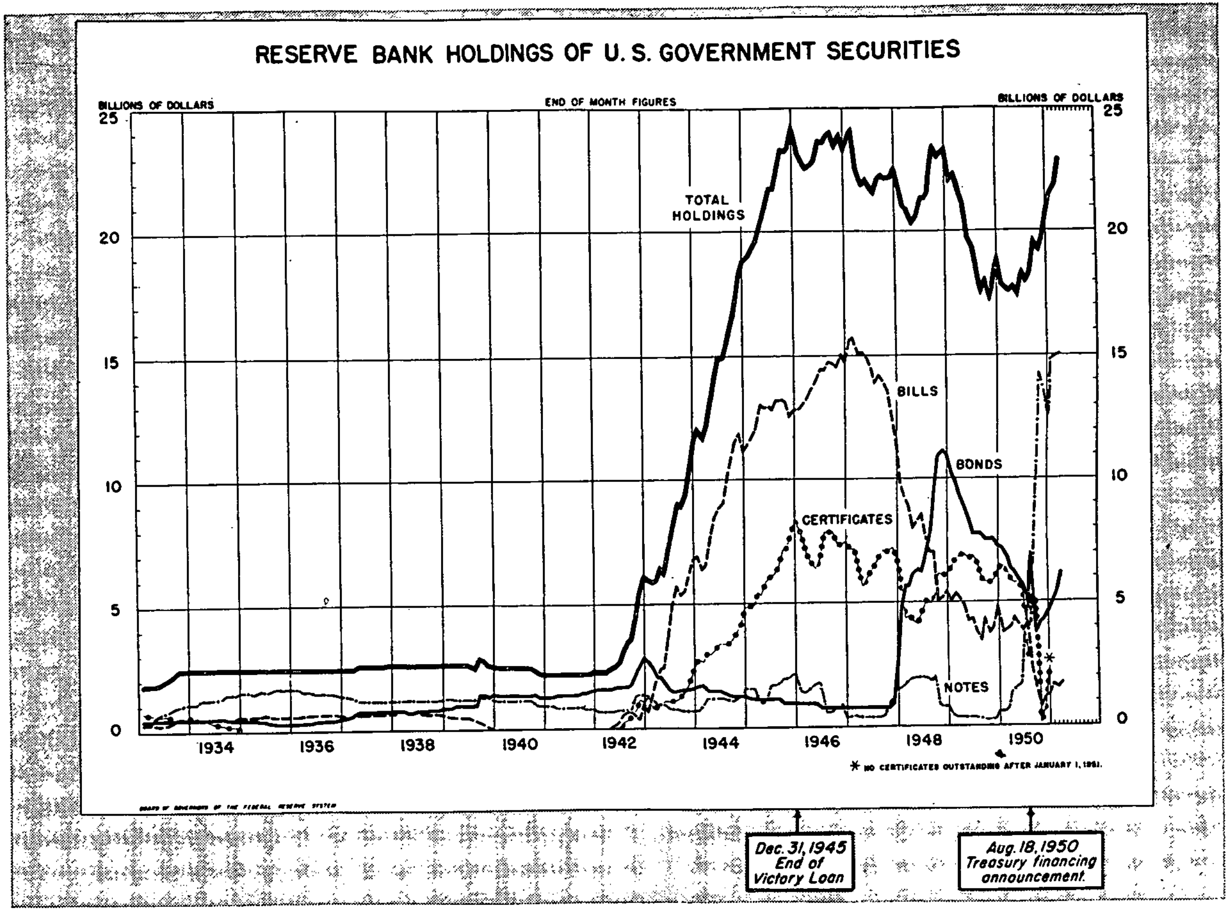
In the area involving the maintenance of financial stability in the transition period, differences between the Treasury and the Federal Reserve developed—as early as July 1945. The Federal Reserve expressed concern mainly about the inflationary aspects of the reconversion period. In particular, it was concerned about the possibilities of credit expansion and monetization of the debt, and in this connection proposed that the preferential discount rate be eliminated and that the fixed three-eighths percent Treasury bill rate be abolished.[4]

The Treasury recognized that monetization of the debt could be a potential problem, but at the time there was little evidence that a real problem of any substantial amount was developing. Primarily, the measure of the degree of monetization of the debt was the extent to which net purchases of Government securities by the System were increasing the volume of Federal Reserve credit outstanding. Government security holdings of the Federal Reserve Banks reached a peak of $24.3 billion at the end of 1945, as a result of the Victory Loan—a peak which was not exceeded at any time throughout the postwar period. (See chart 1.) Average holdings for the period as a whole were considerably below the $24.3 billion figure. In the period when the Treasury and the Federal Reserve were most actively discussing the elimination of the preferential discount rate—between December 31, 1945 and April 24, 1946—Federal Reserve holdings of Government securities were being sharply reduced (by nearly $2 billion).

The Treasury felt also that the business outlook for the reconversion period was unclear. It recognized the inflationary aspects of the situation, but at the same time recognized that there were deflationary possibilities in the change-over from war to peace. The Treasury felt that caution was essential and its approach to the problem of too much money in the economy in relation to too few goods was to shape its policies to encourage, first of all, increasing production—

[4] The preferential discount rate was the preferred rate at which commercial banks might borrow at the Federal Reserve Banks on Government securities due or callable within 1 year; it was one-half of 1 percent compared with 1 percent on other Government securities. The three-eighths percent fixed rate on Treasury bills was the result of a decision made early in the war finance period by which it was agreed that the Federal Reserve Banks would buy all Treasury bills offered to them at a three-eighths percent rate.

CHART 1


RESERVE BANK HOLDINGS OF U. S. GOVERNMENT SECURITIES
BILLIONS OF DOLLARS
END OF MONTH FIGURES
BILLIONS OF DOLLARS
25
20
15
10
5
0
1934
1936
1938
1940
1942
1944
1946
1948
1950
TOTAL HOLDINGS
BILLS
BONDS
CERTIFICATES
NOTES
* NO CERTIFICATES OUTSTANDING AFTER JANUARY 1, 1951.
Dec. 31, 1945 End of Victory Loan
Aug. 18, 1950 Treasury financing announcement.

so that the volume of goods available for purchase would more nearly match the funds available with which to purchase those goods.

Expanding production with a period of stable money markets, the Treasury felt, could expedite the reconversion process. The then Secretary of the Treasury emphasized in a press statement of April 24, 1946 (after the Board of Governors of the Federal Reserve System had approved the elimination of the preferential discount rate), that

> . . . the Treasury has been and is concerned to see that the reconversion of industry, which has progressed so rapidly, should not be disturbed by uncertainty in the money markets.

The Federal Reserve, too, recognized the need for increased production. Such recognition was expressed, for example, by the Chairman of the Board of Governors before the Senate Banking and Currency Committee on May 8, 1946, when he said: "Failure to produce is the chief source of . . . danger." But the Federal Reserve, especially in its discussions with the Treasury, was concerned primarily with ways in which to dampen down the inflationary potential through monetary actions; and the Treasury felt that the proposed actions held considerable risk in the early postwar environment.

The Federal Reserve did not take action on the preferential discount rate (and the three-eighths percent Treasury bill rate) in July 1945; but in December 1945, and again in early 1946, the question of eliminating the preferential rate was reopened. The question of the removal of the three-eighths percent bill rate also came up again during this period, but the Federal Reserve concentrated its discussions on the elimination of the preferential discount rate.

The Treasury felt that the elimination of this rate would be interpreted as presaging higher rates to come; that it would not do much good as an anti-inflationary measure; and that certain risks were inherent in the action. It was felt at the Treasury that the stakes—that is, the danger of upsetting the reconversion effort—were too high to take actions when the outcome was so uncertain and risky. The Treasury's position was stated by the Secretary of the Treasury in a letter he wrote to the Chairman of the Board of Governors of the Federal Reserve System on March 28, 1946, which said:

> I am writing you on the subject of the preferential discount rate on Government securities due or callable in one year or less. As you know, the Federal Reserve System and the Treasury have had several meetings and some correspondence on the question of whether the present preferential rate of ½% should be increased. You will remember that we had an extended discussion on this subject at a meeting in my office last January 30. At that time I promised to send you a letter incorporating my views although I stated verbally that I was opposed to increasing the rate. Subsequently, I had such a letter on my desk when you were here to talk about another subject. I understood from your remarks that the letter was hardly necessary and I believe I told you that accordingly I would hold it up, which I did.
>
> Now I have your note of March 22, referring again to the question of increasing the preferential rate. I still feel that this action should not be taken at this time, primarily because it does not seem wise to rock the boat in the middle of our transition to what I hope will be a full production peacetime economy. Accordingly, I am writing at some length to give you the Treasury's position on this matter.
>
> The elimination of the preferential discount rate at this time would be interpreted by the market as—and would, in fact, be—a first move in the direction of higher short-term interest rates. Higher short-term rates would raise the cost of carrying the public debt and would be of principal benefit to commercial banks, most of which are now enjoying very high earnings.

Whether an increase in short rates would spread to longer-term rates could be determined only by the event—by which time it might be too late to avert serious unfortunate consequences, both to the cost of Government financing and to our hopes of achieving full production and full employment in the postwar period.

I should, therefore, like to renew my request, made to you on previous occasions, that the Federal Reserve System refrain from eliminating the preferential discount rate on short-term Government securities at this time. This request is, of course, without prejudice to the possible elimination of the preferential rate at some future date when such action would be part of a whole policy orientated in the direction of continuing low interest rates, rather than, as it would be now, part of a policy directed toward higher rates.

The significance of the preferential discount rate at the present time is almost entirely psychological. Total borrowings under it are not high in relation to total Federal Reserve credit, member bank reserves, or any other relevant measure. The principal significance of the rate is, as Mr. Sproul so aptly put it in our meeting on January 30, that of a signal to the market of the continuance of the official policy of low interest rates. Mr. Sproul wants to haul this signal down, and you concur. I do not. The Administration policy on low interest rates and the reasons for it were ably restated in the President's Budget Message. If it takes the action you suggest, the Federal Reserve System would be flying one signal and the President another. We cannot afford thus to act at cross purposes during this most critical year in the reconversion of our domestic economy.

I think that it is necessary at the outset to clear up one misapprehension. You and Mr. Sproul stated on several occasions in the course of our January 30 meeting that one of the objects of the proposed action of the Reserve authorities would be to help in combating inflation. As you know, I am as much interested in combating inflation as any man in the country; and I was personally responsible for the Government's anti-inflationary porgram during my tenure as Director of War Mobilization and Reconversion and, earlier, as Director of Economic Stabilization. I should like to state very clearly, therefore, that I see no way in which increasing short-term interest rates would help in combating inflation. In my opinion, you and Mr. Sproul failed to make any case that it would, beyond the mere saying so.

I was greatly surprised by your statement at the meeting that the proposal to eliminate the preferential discount rate was not really part of a program to increase short-term interest rates. I was surprised, not merely because of my knowledge of the general background of Treasury-Federal Reserve discussions of interest rates; but also because previously your Director of Research and Statistics had transmitted to the Treasury three Federal Reserve memoranda, each of which definitely contemplated higher interest rates. One of the memoranda seriously considered the possibility of increasing the rate on certificates of indebtedness as high as 1¼ percent within the next year or so.

During the course of the January 30 meeting, Mr. Sproul qualified your statement that there would not be any increase in short-term interest rates by the phrase "for the time being." He stated that such an increase might be necessary later "as the lesser of two evils." In that event, he said, the Federal Reserve would come back to me with further proposals. I was glad to accept the assurance of both Mr. Sproul and yourself given to me in this connection that the Federal Reserve would not in any event permit the certificate rate to rise, unless there was a mutual agreement between the Treasury and the Federal Reserve.

In view of the qualification expressed by Mr. Sproul, I think that it would be well to review briefly the history of Treasury-Federal Reserve discussions on interest rates.

In going over the records, I find that the Federal Reserve System desired originally to establish a level of short-term rates higher than did the Treasury. You and Mr. Sproul each stated that you were accepting the rates originally set only under duress and because you recognized that the Treasury Department had, as Mr. Sproul put it in a meeting on March 20, 1942, ". . . the full and final responsibility for the financing of this war. . . ."

This was the atmosphere in which the pattern of short-term interest rates was originally set. In looking over the subsequent records, I find numerous references in minutes of meetings to requests by Federal Reserve officials or staff members that the pattern of short-term interest rates be raised. In addition to these references in the minutes of oral discussions, the Treasury records contain numerous written memoranda submitted to the Treasury by Federal Reserve officials or staff members, suggesting in one form or another an increase in some type of short-term interest rates. Memoranda containing such suggestions, which have been excerpted for me, bear dates in June, July, and October 1942; February and November 1943; and March and April 1944.

During my first day in office, Acting Chairman Ransom asked, on behalf of the Board of Governors, that I agree to the elimination of the preferential discount rate. I wrote him on July 27, 1945, saying in part:

"I recognize, of course, that the fixing of discount rates is a statutory prerogative of the Board of Governors and of the Federal Reserve Banks. We have both always recognized, however, that it is necessary, for the duration, to work as a single team in financing the war in the best possible manner. I am sure, therefore, that you will be willing to continue the present preferential discount rate and the present policy with respect to short-term rates as long as it is required in the interest of sound war finance."

The Board of Governors and the Federal Reserve Banks acceded to my request at that time; but on December 13, 1945, you wrote and said:

"With the completion of the Victory Loan, and with Treasury needs for funds during the coming year or longer largely anticipated, it seems to me, and to the other members of the executive committee of the Federal Open Market Committee, that an especially favorable opportunity is provided to eliminate this preferential discount rate . . ."

I replied on December 29, saying in part:

". . . the war has ended, and the Victory Loan campaign has been successfully concluded. It seems to me, however, that the continuation of the preferential rate is as important to the successful financing of the transition period, and to the maintenance of full production and full employment in the postwar period after the close of the transition as it was to the successful conclusion of war finance. I feel sure that upon considering the matter further you will agree with me."

In this letter I stated that I should be glad to discuss the matter with you, and we discussed it quite thoroughly at the meeting on January 30.

The war on the battle fronts is over, but the public debt problems which it has left behind will be with us for a long time to come. We owe it to the country that these problems continue to be solved in the public interest. I know, therefore, that I can count, as the President stated in his Budget Message, on the continued cooperation of the Federal Reserve System in this matter.

The Chairman of the Board replied to the Secretary's letter, on April 19, as follows:

My associates and I were surprised by your letter of March 28, not because we were in doubt as to your attitude concerning the elimination of the preferential discount rate, but because of the fundamental misconception of our views which your letter contains. We do not advocate a higher level of interest rates than the Government is now paying, because higher rates would increase the cost of servicing the public debt and increase the earnings of commercial banks growing out of their holdings of Government securities. We do not favor either result.

While we are reluctant to burden the record with further discussion of this matter, we think it important to emphasize that there is nothing in the record to justify the statement in your letter that the proposal to eliminate the preferential discount rate is "really part of a program to increase short-term interest rates." That is not the purpose. The purpose is to avoid giving further impetus to the inflationary forces which now exist in our economy, among which must be included the supply of money in the hands of the public, particularly in its most active form—currency and bank deposits. We must refuse, therefore, to be ranged on the side of the advocates of a higher interest rate policy. That is not the question here and should not be permitted to confuse the real issue.

The question is simply whether we propose to perpetuate a wartime measure which no longer serves the purpose for which it was designed but, quite the contrary, tends to aggravate the inflationary pressures which the Government is properly trying to combat. We are at present flying a signal—to borrow your metaphor—which is the direct opposite of the declared policy of the Government. We are, in effect, inviting member banks to come to the Reserve Banks and borrow at a preferential rate on Government securities due or callable in not more than one year, thus encouraging these banks to purchase Government securities as well as to make loans to others for the purpose of purchasing Government securities. This process has made for speculative profits, but it could not reduce the cost of Government financing unless the intention is to countenance and then take advantage of a further lowering of the entire interest rate structure of the country. That, as we understand it, would be contrary to your policy. It would certainly be contrary, in our judgment, to the best interests of the country.

When the preferential rate was adopted in 1942, the Board felt, and so stated, that in ordinary circumstances such preferential rates should not be established. It was recognized, however, that the war financing program would require substantial purchases of Government securities by the banks and it was the belief of the Board that, if there were a preferential rate for advances secured by Government obligations, that fact would encourage member banks, particularly outside the financial centers, to invest more of their then existing excess reserves in short-term Government securities, and that the preferential rate could be eliminated when the need had passed. Today it serves a wholly undesirable purpose, namely, that of facilitating further monetization of the public debt through the commercial banking system. We think you are flying the right signal of discouraging further creation of bank credit, but we find ourselves signalizing through this special rate exactly the opposite course.

You express the opinion that the elimination of this rate would be interpreted by the market as a first move in the direction of higher short-term interest rates. You will agree, we feel sure, that the adoption of what is the right policy should not be avoided for fear it would not be correctly understood. The boat can be rocked in this critical transition period by failing to do things which ought to be done as well as by doing things which ought not to be done. The important point, however, is that we have assured you that we would maintain the market for the ⅞-percent certificates of indebtedness so that there would be no question about refunding or refinancing at this rate. Accordingly, if the elimination of the preferential discount rate were misinterpreted, official action through open market operations would promptly disabuse the market of its mistaken interpretation.

We do not agree that the significance of the preferential rate at this time is almost entirely psychological. The figures on the amount of borrowing under the preferential rate can easily be misleading because bank reserves thus created provide the basis for an expansion in credit of approximately six times the amounts borrowed. Thus, borrowings of 300 to 700 million dollars in recent weeks have provided support for about six times as much additional bank credit, which is by no means insignificant. Moreover, banks are thus encouraged to lend to their customers at excessively low rates which, in turn, makes for speculation in and holding of Government securities on bank credit. For example, current figures for reporting member banks show loans of 1.6 billion dollars to dealers and loans of 1.9 billions to others for the purpose of purchasing or carrying Government securities, or a total of some 3.5 billion dollars. Such bank loans represent exactly as much monetization of the public debt as if the banks themselves purchased the Government securities directly. While you are rightly, we believe, utilizing Treasury balances to pay off Government debt, largely that held by the banks, the Reserve System by its preferential rate is inviting the banks to nullify the effect of your action by borrowing from the Reserve Banks for the purpose of purchasing or holding Government securities. Furthermore, to the extent that the interest rate structure is thus being depressed below the levels on which the Treasury's financing has been based since the beginning of the war, the inflationary consequences are real and plainly evident, particularly in the entire field of capital assets, that is, in real estate, including homes, farms and business properties, as well as in the stock market.

We wish to emphasize with all the force we can command that our purpose and policy are based not on a desire for a higher level of interest rates and hence increased costs of carrying the public debt, but entirely on grounds of discouraging further needless monetization of the debt through a wartime mechanism. Elimination of the rate, far from indicating that the Treasury and Federal Reserve were flying opposite signals, as you put it, would signify that we were in accord instead of working at cross-purposes as we appear to be doing now.

We do not believe that, when the question is reviewed in this light, the Treasury would wish to ask us to continue following a policy which is unquestionably inflationary and wholly at variance with the President's stabilization program. The Treasury, of course, is properly concerned with any measure that might affect the cost of Government financing. However, we have given assurance that we will not permit elimination of the preferential discount rate to increase the present certificate rate or other rates now paid by the Treasury. Having thus been assured that its interest in the matter will be fully protected, the Treasury, it seems to us, would not wish to be put in the position of objecting to the System's discharge, in accordance with its best judgment, of a statutory responsibility placed upon it by Congress.

The incorrect premise upon which your letter is based is illustrated by your statement that we made no case as to how increasing short-term interest rates would help in combating inflation. We made no such case, of course, because our argument was not based on an increase in short-term rates. The case we sought to make and thought we had demonstrated clearly was based on our earnest desire to stop further creation of inflationary bank credit, both directly and indirectly.

It should be borne in mind that our increasing production will generate an increasing income that will currently provide means of purchasing what is produced. If this newly created income has to compete not only with the existing excessive supply of liquid funds, but also with further increases in the money supply resulting from bank credit expansion, we can have a destructive inflation no matter what our production may achieve.

Finally, we believe that an impartial review of the recommendations made by the Board and Open Market Committee to the Treasury from the inception of the defense and war financing programs will demonstrate beyond any possible question that we have consistently advocated policies and measures for financing the war at low and stable rates of interest. The pattern of rates on market issues agreed upon by the Treasury and the Reserve System ranged from the ⅞-percent rate on certificates to the 2½-percent rate on the longest term Treasury bonds. There was also the ⅜ rate on 3-month Treasury bills. The only official recommendations the System has made at any time for any higher rate related exclusively to the bill rate. It became evident early in the war that the banks were less and less interested in buying bills and increasingly disposed to buy the longer-term, higher-yield issues, with the result that they sold the bills to the Reserve System and concentrated more and more in the longer term securities, thus increasing the over-all cost of Treasury financing. Our recommendations were made with the expectation that a somewhat improved bill rate would result in the banks holding more of the bills and hence fewer of the longer-term, higher-yield issues, thus reducing the over-all cost of Treasury financing. Time has served to confirm the view that the banks would be increasingly uninterested in bills at the ⅜ rate, for at present the Federal Reserve System holds nearly all of the bills outstanding. To construe our suggestions on the bill rate as signifying a purpose on the part of the Federal Reserve authorities to increase the rate structure and the costs of carrying the debt is to misread completely the plain purpose of the proposals.

As for memoranda exchanged between our staff members and yours, such memoranda were not submitted as official Federal Reserve proposals and are not properly so regarded. They canvassed a variety of ideas and alternatives for dealing with the situation but recommended no particular line of action. They have no place whatever in a discussion of the Board's own views in connection with the preferential discount rate and were given to members of your staff with that understanding. Continuous study and consultation between our staffs, analyzing and exploring all relevant ideas, seems to us to be highly desirable, but such consultations and staff memoranda connected therewith should not be confused with official policy.

We are embarked on a joint enterprise. We are all seeking to solve the difficult postwar problems of fiscal policy, monetary policy and debt management in the public interest, and in no other. We know the course that has been set by the Government. We want to discharge our responsibilities effectively as part of the general program of the Government. We believe that the elimination of the preferential discount rate would be in accord with the request of the President in his recent Executive Order, when he said:

"For the duration of the existing emergency all departments and agencies of the government shall, in any matter affecting the stabilization of the economy, in which they have discretion in the use of their powers, exercise such discretion in such manner as will best promote the continued stabilization of the economy."

In this letter, the Chairman of the Board based the case for eliminating the preferential discount rate on the fact that it would tend to restrict monetization of the debt. He said, for example, that:

. . . The figures on the amount of borrowing under the preferential rate can easily be misleading because bank reserves thus created provide the basis for an expansion in credit of approximately six times the amounts borrowed.

Thus, borrowings of 300 to 700 million dollars in recent weeks have provided support for about six times as much additional bank credit, which is by no means insignificant. Moreover, banks are thus encouraged to lend to their customers at excessively low rates which, in turn, makes for speculation in and holding of Government securities on bank credit. For example, current figures for reporting member banks show loans of 1.6 billion dollars to dealers and loans of 1.9 billions to others for the purpose of purchasing or carrying Government securities, or a total of some 3.5 billion dollars. Such bank loans represent exactly as much monetization of the public debt as if the banks themselves purchased the Government securities directly. . . .

As has already been stated in this answer, the Treasury recognized monetization of the debt as a potential problem, but felt that the figures did not indicate there was any real tendency in this direction at the time.

In the first place, the bulge in member bank borrowings from the Reserve Banks at about the time the letter was written was temporary. It was accounted for—according to the *Federal Reserve Bulletin* for May 1946—by drains on member bank reserves resulting from the retirement of Government securities held by Federal Reserve Banks, and from large income tax receipts by the Treasury which temporarily added to Treasury balances at the Reserve Banks. The commercial banks were borrowing temporarily to meet this drain, rather than meeting it by sales of Government securities.

In the second place, based on the figures that were available at that time (loans of weekly reporting member banks), there was no evidence that member bank borrowing was actually being used as a basis for additional credit of approximately six times the amount borrowed. Loans of weekly reporting member banks, as a matter of fact, *declined* by $800 million during the first 4 months of 1946.

Finally, reporting member bank loans for carrying Government securities were also declining. When the April 19 letter was written, the total had already declined substantially from the peak reached in December 1945 and it continued to decline throughout 1946—as the Board of Governors noted in its Annual Report for that year, in which it said: "Such loans, after reaching a peak at the end of 1945 during the Victory Loan Drive, declined rapidly and almost without interruption."

Shortly after this exchange of letters, the Federal Reserve System eliminated the preferential discount rate—in late April and early May 1946. However, the Chairman of the Board assured the Secretary of the Treasury that the Federal Reserve would not allow this action to affect interest rates on Government securities; and the Board's official announcement of the action also contained the statement that the discontinuance of the preferential discount rate would not involve any increase in the cost to the Government of carrying the public debt.

The debt pay-off program being carried out by the Treasury was a second factor which caused the Federal Reserve to suspend temporarily its efforts to take actions which would have the effect of raising short-term interest rates—particularly with respect to the elimination of the fixed three-eighths of 1 percent rate on Treasury bills. This program, inaugurated on March 1, 1946, was putting considerable strain on bank reserves with some restrictive influence on bank credit.

The debt pay-off program was carried out by the Treasury after consultation with the Federal Reserve. Prior to the inauguration of the program on March 1, 1946, the Treasury had discussed with the

Federal Reserve the desirability of using the large Treasury cash balance remaining after the Victory Loan to retire public debt, particularly that held by the commercial banking system. These discussions led to a program of debt reduction that was especially helpful during the ensuing period. There were, of course, offsetting forces leading to private credit expansion, but the policy of retiring debt held by commercial banks and Federal Reserve Banks exerted a dampening influence on inflationary pressures.

This policy was continued throughout the postwar period, and between March 1, 1946, and June 30, 1951, resulted in a reduction of over $35 billion in the Government security holdings of the banking system. This was achieved by the use, first, of cash balance funds as described above; and, subsequently, by the use of the budget surpluses of the Federal Government that occurred in the fiscal years 1947, 1948, and 1951, and the funds made available as a result of an increase in the amount of debt held by Government investment accounts. The net effect was a substantial reduction in the proportion of the public debt held by the commercial banking system—which declined from 42 percent on March 1, 1946, to 32 percent on June 30, 1951.

2. January through October 1947

By 1947, it was becoming clear that the country had done a remarkably good job of reconversion and the widespread fear of transition unemployment was being dissipated. The inflationary problem stood out in clearer perspective. In these conditions, the Treasury felt that the risk attached to market unsettlement was not so grave and that it was possible to move toward more flexibility in short-term rates—which meant in this instance to move in the direction of higher short-term interest rates.

Discussion between the Treasury and the Federal Reserve took place during this period looking forward to some change. As the end of the first phase of the debt pay-off program approached, the Federal Reserve was again concerned about the possibility of shifts by security holders, chiefly commercial banks, from short-term debt to long-term debt. This practice, the System felt, had been suspended because the Treasury in retiring over $20 billion of maturing debt had put pressure on bank reserves. In early 1947, the Federal Reserve was worried that there might be a resumption of the tendency for banks to sell short-term securities to the System in order to buy longer-term securities, with resulting monetization of the debt.

Again, the Treasury did not feel that the shifting problem was as serious a prospect as the Federal Reserve felt it to be. The figures for commercial bank holdings of Government securities did not show that reaching out for longer-term issues was a real factor. There was, it is true, some increase at this time in bank holdings in the 1- to 5-year maturity range, but this was more than offset by a decline in holdings with more than 5 years to maturity. Holdings of securities having 1 year or less to maturity had, of course, been reduced substantially as a result of the debt pay-off program in which a substantial portion of maturing certificates and other issues had been retired.

Nevertheless, now that the economy had passed through the most critical transition stage, the Treasury felt that it could prudently consider taking steps toward higher short-term rates. No one could say how useful this would be as a counter-inflationary step, but in any event it seemed appropriate to free ourselves from the rigidity of wartime rates. The Treasury has never believed that any interest rate pattern was good for all time; obviously, peacetime fluctuations in the level of business activity call for changing general credit control actions and for some accompanying changes in interest rates.

There was some difference of opinion between the Treasury and the Federal Reserve as to the timing of the interest rate actions and the rapidity with which they should be put into effect. Despite these differences in emphasis, the Treasury and the Federal Reserve did move together in the direction of higher rates in this period. The bill rate was allowed to move up starting in July 1947. The 1-year certificate rate was raised from the $\frac{7}{8}$-percent wartime rate which still existed in 1947 to $1\frac{1}{4}$ percent by the fall of 1948, by means of a series of certificate and short note issues which accomplished the change in a gradual way.

In the same period, the Treasury and the Federal Reserve were also taking important steps in the long-term bond market. In the latter part of 1946 and early in 1947, upward pressure developed on the prices of Government bonds. We felt that a continuation of the upward move might imperil stability in the bond market. Long-term bonds were selling at substantial premiums—the Victory Loan $2\frac{1}{2}$'s were high enough in price to approach a $2\frac{1}{4}$-percent yield; and we recalled that at one point in the spring of 1946 they had stood at $2\frac{1}{8}$ percent. We felt there was a real danger that the prices of the longest-term restricted bonds would go high enough to force yields down near the 2-percent level—this would mean prices around 108. The Treasury and the Federal Reserve were agreed that the supply of long-term Governments should be increased in order to dampen the market.

Under these circumstances—and in the absence of any substantial holdings of Government bonds by the Federal Reserve Open Market Account—the Treasury sold long-term taxable Government securities from Government investment accounts where the proceeds could be appropriately shifted to special securities issued to these accounts. About $\$\frac{1}{4}$ billion had been sold in the last half of 1946. Then in 1947, we sold $\$1\frac{1}{2}$ billion of such bonds from April into October.

Also, late in September 1947, as a part of the policy of increasing the supply of long-term bonds in the market, the Treasury offered a new long-term nonmarketable bond to institutional investors—the investment Series A issue. This was adapted from Series G savings bonds. It paid $2\frac{1}{2}$-percent interest per annum if the bonds were held to maturity (18 years), but yielded a smaller return if redeemed earlier. The Federal Reserve recommended that this issue should be placed "on tap," rather than limiting the amount which could be purchased by each investor. The Treasury felt, however, that caution should be taken not to oversupply the market—which might result in switches out of existing holdings, and too much downward pressure on the market. Accordingly, applications for the Investment Series were limited by a purchase formula; and about $1 billion of the bonds was sold.

In all, the Treasury thus provided the market with over $2½ billion of long-term bonds to meet the buying pressure which had developed.

3. November 1947 through December 1948

The actions just described accomplished the purpose of taking the upward pressure off the prices of long-term Governments. In fact, it soon appeared that the program had probably been prosecuted too vigorously, in view of the surrounding circumstances. While the program was being carried on, opportunities for investment in mortgages and corporate securities were increasing sharply, with a consequent decline in the demand for Government bonds, especially on the part of institutional investors. The result was a marked weakness in the Government bond market starting in October 1947. The selling program was abandoned; and the Treasury and the Federal Reserve started buying Government securities to keep the market stable.

The buying program began on November 12, 1947. The Treasury pursued an aggressive policy in the purchase of longer-term, higher-yield bonds—principally bank-restricted issues—which it was buying for its investment accounts. The Federal Reserve, on the other hand, which was buying largely short- and medium-term bonds, was a hesitant buyer at this stage—failing to take all of the securities offered. The general technique was for the Federal Reserve to purchase only a portion of the securities offered by any seller at any one time. This added to investor apprehension. An increasingly large amount of securities came to be held by investors who wanted to sell; and there was continued downward pressure on prices.

It was in this situation that on December 24, 1947, the Federal Open Market Committee dropped sharply the prices at which it stood ready to purchase Government securities, and began to purchase freely all Government securities offered. No issue was allowed to go below par, but the price drops in some cases amounted to more than 2 points. The bank-eligible 2½'s of September 15, 1967–72, for example, had sold at 103 7/32 (bid) at the close of business on December 23, and the new purchase price established by the Federal Reserve on December 24 was 101. The new purchase price on the longest-term bank-restricted issue—the Victory Loan 2½'s—was 100 8/32 (bid).

The Open Market Committee had decided, on December 9, to drop prices on Government securities after the Treasury's refunding operation had been completed later in the month. The Treasury had some misgivings about this step, but the Open Market Committee decided to take it, and a date of action was agreed upon.

The action came as a complete surprise to the market. Although the Federal Reserve had hoped that the action would reduce selling of bonds, such selling continued—part of it reflecting portfolio switching by investors to protect themselves against further price declines. Some life insurance companies, for example, traded holdings of 20-year, 2½-percent bonds for 3-month, 1-percent Treasury bills. Many investors were selling the very Government securities they had been purchasing a few months before. The result was further disruption of the market; and, for some time, the market continued to reflect uncertainties on the part of portfolio managers and institutional investors.

During the period of the buying program, the Federal Reserve acquired on net balance approximately $10 billion of bonds in the market.

Simultaneously, however, the System reduced its portfolio of short-term securities sharply. A large Federal budget surplus, coupled with a substantial increase in the nonmarketable Government security holdings of nonbank investors, made it possible for the Treasury to take important steps to reduce the amount of Government securities held by the commercial banking system. The debt pay-offs were a vital part of debt management and by concentrating them on bank holdings the pay-off program was carried out in the most advantageous way. Treasury and Federal Reserve activities were coordinated continually.

While the bond buying program was in progress, the Treasury paid off approximately $9 billion of maturing marketable issues of Government securities. These pay-offs were a major factor in enabling the Federal Reserve to limit the increase in its total portfolio of Government securities to a little less than $1 billion, even though it was buying $10 billion of bonds. This relatively small increase was more than accounted for, moreover, by amounts of Government securities which flowed to the Federal Reserve as a result of increases put into effect during the year in reserve requirements on all classes of member banks. These reserve requirement increases and the reinstitution of consumer credit controls after the Congress provided the authority were a part of the Reserve System's anti-inflation program in 1948.

It may be added here that the Federal Reserve—as well as the Treasury—was wholeheartedly in favor of the market stabilization program. During this period, on many occasions officials of the System publicly stated a firm belief in the policy.

The Board of Governors of the Federal Reserve System in its Annual Report for 1947 (released in May 1948) stated:

> . . . constant Federal Reserve operations are essential for the maintenance of an orderly market and reasonable stability of prices. . . .
>
> . . . The Board believes that it would be unwise to set aside this responsibility [for the orderliness and stability of the Government securities market] in view of likely adverse effects on financial institutions, on the Government's fiscal and debt-management operations, and on the financial position of business.

The President of the Federal Reserve Bank of New York made a speech before the New York State Bankers Association on January 26, 1948, in which he emphasized the wisdom of the Federal Reserve's policy of maintaining stability in the market for Government securities. In the course of this address, he said:

> . . . Without our support, under present conditions, almost any sale of Government bonds undertaken for whatever purpose . . . would be likely to find an almost "bottomless market" on the first day support was withdrawn. . . . In the face of a Federal debt of over 250 billion dollars . . . we can't treat the Government security market as we might a $50 million issue of the XYZ corporation. I am not a believer in more and more Government controls, certainly, but this is one control which I would not want to try to let go, voluntarily, under present circumstances.

The Acting Chairman of the Board of Governors—speaking for the Board—also stressed the necessity for protecting the Government's fiscal and debt management position by maintaining an orderly and stable market for Government securities, although this objective, the Federal Reserve felt, made it impossible for the System to restrain effectively further monetary expansion by the use of traditional powers. In an appearance before the Joint Committee on the Economic Report, on April 13, 1948, he said:

> The people in the Reserve System, not only the Board, but the Reserve bank people, as well as the Board people, are unanimous, I think, in feeling that, taking the matter on balance—with the public debt the size that it is . . .—we must maintain stability of [the] Government securities market and confidence in it. . . .

He urged enactment by the Congress of legislation which would give the Federal Reserve System "new powers": (1) to increase the cash reserve requirements of *all* commercial banks; and—if banks should continue to sell Government securities to the System in order to expand private credit—(2) to require all commercial banks to maintain additional special reserves which could be held, at the option of the individual bank, in either specified cash assets or short-term Government securities.

The buying program terminated in the latter part of 1948. It was a tremendous operation, and the repercussions on the economy might have been serious if the Federal Reserve had not carried out the program vigorously.

4. January 1949 through June 1950

By 1949, the country had moved to a period of business unsettlement. The unsettlement was not of major porportions, but it called for changes in monetary and debt management policy.

Short-term interest rates were moved down—the rate on 1-year certificates was reduced from the 1¼ percent level reached in late 1948 to 1⅛ percent. The Federal Reserve reduced member bank reserve requirements, eased consumer credit controls, and lowered margin requirements on stocks. At the end of June, additional reserve requirement easing and also further easing of consumer credit terms resulted from the expiration of temporary legislation authorizing these measures. At about the same time, the Federal Open Market Committee, after consultation with the Treasury, announced that

> . . . with a view to increasing the supply of funds available in the market to meet the needs of commerce, business, and agriculture it will be the policy of the Committee to direct purchases, sales, and exchanges of Government securities by the Federal Reserve Banks with primary regard to the general business and credit situation. The policy of maintaining orderly conditions in the Government security market, and the confidence of investors in Government bonds will be continued. . . .

In the latter part of 1949, the business outlook started to show improvement, which continued in the first half of 1950. The Federal Reserve thought it should act at once to meet the changing economic situation. In early January of 1950 it recommended that short-term rates be moved up once again—from the 1⅛ percent 1-year rate to 1¼ percent on a 14-month note. The Treasury was not sure that this was desirable so soon and felt that caution was called for. It might be unwise to clamp down immediately upon the upturn in business which had barely started. The Treasury agreed, however, to go along with a gradual raising of the certificate rate. The first step toward this was taken with the issue dated February 1.

The Treasury also had some doubts about the wisdom of putting pressure on the long-term bond market during this period, such as was resulting from Federal Reserve selling. The Federal Reserve had reduced its Government bond holdings by \$3¾ billion during 1949. Now in early 1950, the Treasury was uncertain as to how much additional selling pressure the long-term market could stand. Our analyses in the first half of the year showed that there was no substantial net demand for Government securities on the part of long-term institutional investors. The bonds sold by the Federal Reserve were acquired by nonbank investors primarily by switches from short-term issues. Nevertheless, the Federal Reserve sold \$1.6 billion of bonds during the first half of 1950. It increased its holdings of short issues by over \$1 billion, however, with the result that the total portfolio of the System declined by less than \$600 million.

In view of what happened after the outbreak of hostilities in Korea, it is interesting to keep the fact in mind that on net balance the Federal Reserve reduced its portfolio of Government securities in the first half of 1950. This came on top of a \$4½ billion decline in 1949. (Refer to Chart 1, p. 251.) This was the opposite of monetization of the debt. Yet, in the summer of 1950, the Federal Reserve justified actions which resulted in serious unsettlement of the Government security market on the grounds that it was necessary to take steps to prevent further debt monetization.

It might be mentioned at this point that, throughout the whole period up to Korea, the Federal Reserve and the Treasury worked very closely to achieve the right kind of debt-management program. From March 1, 1946—when the postwar debt repayment program was initiated—through June 30, 1950, the Government security holdings of commercial banks and Federal Reserve Banks were reduced by nearly \$33 billion. The total amount of public debt outstanding was reduced by approximately \$22½ billion, and nonbank holdings of the Federal debt (largely Government investment accounts) increased by over \$10 billion during the same period.

5. July 1950 to March 4, 1951

The outbreak of the Korean conflict in June 1950 made it necessary for both agencies to take a new look at monetary and debt management problems and policies. Divergent views between the Treasury and the Federal Reserve developed. Up to Korea, our disagreements had generally been relatively minor. We felt that we had time to work things out and that mistakes or concessions in policy on the part of one agency or the other could be ironed out in the course of time. We felt that it was important to bring a cooperative spirit to bear on our mutual problems. Differences of opinion between the Treasury and the Federal Reserve should be resolved by discussion, mutual understanding, and, when necessary, by compromise—as I have stated in the reply to other questions in this series.

When aggression broke out in Korea, the Treasury visualized the possibility of a third world war. We recalled that no more than a single bullet in a relatively little known Balkan town had set off World War I. We went over what a war would mean with respect to the finances of the Government of the United States. It seemed clear, moreover, that even if a third world war did not materialize, it would hardly be possible to avoid in the period ahead a tremendous expansion in the country's military programs. This would require that the financial affairs of the Nation be maintained in good shape. The

Treasury felt that preparation should be made for all eventualities. This was made clear to the Federal Reserve immediately—starting on June 26, right after the first hostile action in Korea occurred.

The Treasury's position was expressed again in a letter sent to the Chairman of the Board of Governors, on July 17, 1950, in which it was restated that stability in the Government bond market was of paramount importance. The letter stated, also, that it was imperative that every financing operation of the Government be carried through to a successful conclusion. The letter read as follows:

Thank you very much for your letter of July 12, expressing your thoughts and those of the Executive Committee of the Federal Open Market Committee with respect to new financing and the current situation in the Government bond market.

As I asked Mr. Bartelt to transmit to the Open Market Committee on June 26, I feel that everything possible should be done to maintain a basically strong position in the Government bond market during the present period of international disturbance. The firmness with which the market has withstood the impact of the events of the past three weeks is certainly a testimonial to good management. It is also the best possible evidence of the confidence which has been built up in our ability and determination to maintain a stable market for Federal securities.

I know you will agree with me that it is of the utmost importance at the present time to maintain that confidence and, in addition, to do everything possible to strengthen it. This involves, first of all, avoiding any course which would give rise to a belief that significant changes in the pattern of rates were under consideration. The operations of the Open Market Committee since the beginning of the crisis have been well adapted to this end.

As I have studied the situation, I have become convinced that present circumstances call for one further precaution which is, perhaps, of even greater importance than maintaining a good balance in current market operations. In my view, we must take extreme care to avoid introducing any factor which would run the risk of producing unsettlement in the broad market for Federal securities represented by investors throughout the Nation. It is my belief, in particular, that no new financing program should be undertaken at the present time without maximum assurance that it will be well received and can be carried through to a successful conclusion.

Our future tasks, whatever they may be, would be made very much more difficult by anything less than 100 percent success in a program for raising new money. In my judgment, we can not attain the maximum assurance of success until the outlook with respect to both the international and the domestic situations has become considerably more clarified.

At present, the defense needs which may have to be financed in the near future are not known. Our expectations as to revenues are also subject to considerable change as the situation develops. For these reasons, as you know, I recommend that the Congress postpone action on the tax [reduction] bill now under consideration in the Senate Finance Committee. The same basic considerations lead to my strong belief that no new financing program whose reception is to any considerable extent unpredictable should be introduced into the market at the present time.

There are, of course, occasions which call for quick and bold action. These occasions have occurred with respect to the Federal security market and they may occur again. But every appraisal of the present situation indicates that the maintenance of stability should take priority over all other market considerations. A stable and confident situation in the market for Federal securities is our first line of defense on the financial front, no matter what may be ahead of us.

As you know, developments in the Government bond market have repercussions which fan out through the entire economy. Both the size and the wide distribution of the Federal debt are unprecedented in comparison with the situations which faced us at the start of other periods of crisis. Under these circumstances, we have an obligation of the highest order not only to maintain the finances of the Government in the soundest possible condition, but also to fulfill our responsibilities to the millions of Federal security holders throughout the Nation.

There is one further consideration which confirms my view that the present situation calls in the highest degree for caution and prudence. During the present stage of the emergency, it is vital to make use of every opportunity for assuring our citizens that those at the head of their Government have a strong and steady hand on the helm. The response of the Nation to the President's courageous action in the Korean crisis was one of the greatest demonstrations of unity that we have ever had in this country. The Nation is now waiting to learn what domestic programs may be needed in order to utilize our full strength in the interests of national defense. When these programs are brought forward, it will take time for the public to assimilate them. In view of these facts, it is of the utmost importance that no action be taken at the present time which could be construed in any sense as anticipating proposals for defense which may later be outlined by the President.

In short, every circumstance at the present time calls for steadiness and manifest strength in the Federal security market as a primary measure of economic preparedness. That is the net of the situation as I see it. And, as you will note, I am sending my thoughts on to you just as they have occurred to me, in order to let you know the course of my thinking as events unfold.

Nevertheless, the Federal Reserve wanted to raise short-term interest rates. The Treasury had been willing to raise interest rates cautiously in the far different environment of 1947–48 and early 1950. But this was a new situation. The Treasury did not know what was ahead—we did not know how great the Government's financial needs would be. It was clear, however, from the day aggression commenced in Korea that a decisive and critical period in the life of the Nation had been reached. From a financial standpoint, the most important thing was to assure the successful financing of whatever was ahead. The Treasury felt that this could not be accomplished if the Government bond market were disrupted.

I was as concerned about preventing inflationary pressures from gaining headway in the economy as anyone else. In fact, I believe I may justifiably say that I was in the forefront in recognizing the inflationary dangers after the outbreak of hostilities in Korea and in recommending measures designed to aid in controlling this situation. Within a few days—on July 5—with the approval of the President, I indicated to the Congress that it might be necessary to undertake new tax measures. Later during the hearings held by the Senate Finance Committee, the Senate, on July 12, shelved the tax reduction bill which had been under consideration in order to make way for new measures which would bring in larger revenues.

It seemed to the Treasury that an effective approach to the inflation problem required a broad program operating on many fronts. It required increased tax revenues. It required that the Government cut its expenditures in the nondefense area whever practicable; and especially that the Government, as well as the public, exercise great restraint in the use of those goods and services which would be needed for our increased defense requirements. It required a strong program to promote greater savings—not just savings in the form of Government securities, but savings in all forms. This, indeed, has been the keynote of the Treasury's savings bond promotional efforts throughout the war and postwar decade. The Treasury has not been concerned with selling savings bonds alone—efforts have been directed toward promoting thrift in all forms. As the necessity for a greatly increased defense program became clear following the invasion of Korea, the importance of savings programs of all kinds also became greatly enhanced.

In addition to larger revenues, cuts in nondefense expenditures, and increased savings, it was clear that the maintenance of sound economic and financial conditions during a period of heavy defense build-up required a program of other measures such as those asked for by the President and provided by the Congress in the Defense Production Act of 1950. Among these measures were selective controls not already authorized by law which could act in specific areas of inflationary pressures without interfering with essential productive processes in other areas. It was for this reason that the President advocated restraints such as those which operate in the areas of consumer installment credit and real estate credit.

The Federal Reserve agreed with the Treasury that the measures which have just been described should be used to combat inflation. Officials of the Federal Reserve System were in favor of increasing taxes. They encouraged the savings bond program. The System administered the President's program of selective credit restraints, and has done a good job in administering a difficult program.

But the Federal Reserve also felt that great reliance should be placed on traditional measures of general credit restraint which involved a declining securities market and increases in interest rates. It was in this specific area that disagreements between the Treasury and the Federal Reserve arose. The Treasury felt that there were significant reasons why important reliance on these traditional measures of general credit restraint was not appropriate under the circumstances existing after the outbreak of hostilities in Korea.

In the first place, some credit expansion in certain areas of the economy was necessary to facilitate the country's primary objective—the production of essential defense and military goods. In order to be effective in the areas of special inflationary pressures which needed to be restrained during the defense period, measures of general credit restraint might have had a stringently repressive effect upon every area of the economy.

In the second place, the country as a whole had such a large volume of liquid assets that it was insulated to a considerable extent from the effects of general credit restraint actions of the type proposed by the Federal Reserve. It is true that bank credit expansion contributed to the inflationary situation after the outbreak of the Korean hostilities and it is clear that unnecessary loans should have been curtailed. However, credit expansion was only one of the many factors contributing to the rise in the general price level.

The primary cause of the inflationary situation, throughout the entire postwar period, was an unprecedented demand for goods by business and consumers generally. Before Korea, individuals bought goods to fulfill the stored-up demands which had resulted from the shortages of World War II; and industry replaced and expanded plant and equipment in order to meet civilian peacetime needs. After Korea, individuals and businesses, remembering the shortages of World War II, bought goods in anticipation of shortages in the defense period; and requirements for materials and goods were also stepped up sharply in order to meet the expanded military needs of the period. Some of these purchases were financed by an expansion of bank credit—but not all of them, by any means. Bank credit, for example, accounted for only about one-tenth of the 1950 financial needs of business corporations.

In this situation, the Treasury felt that major reliance in controlling inflationary pressures should not be placed on traditional methods of general credit control. As already stated, the Treasury felt that higher taxes, restraint in nondefense Government expenditures, greater savings, and various selective measures suitable to the defense situation were called for. These, it was felt, were the appropriate ways to combat inflationary pressures under the existing circumstances. The Treasury felt, further, that stability in the market for Government securities was essential, and that the pursuit of policies which would unsettle the market would be unwise.

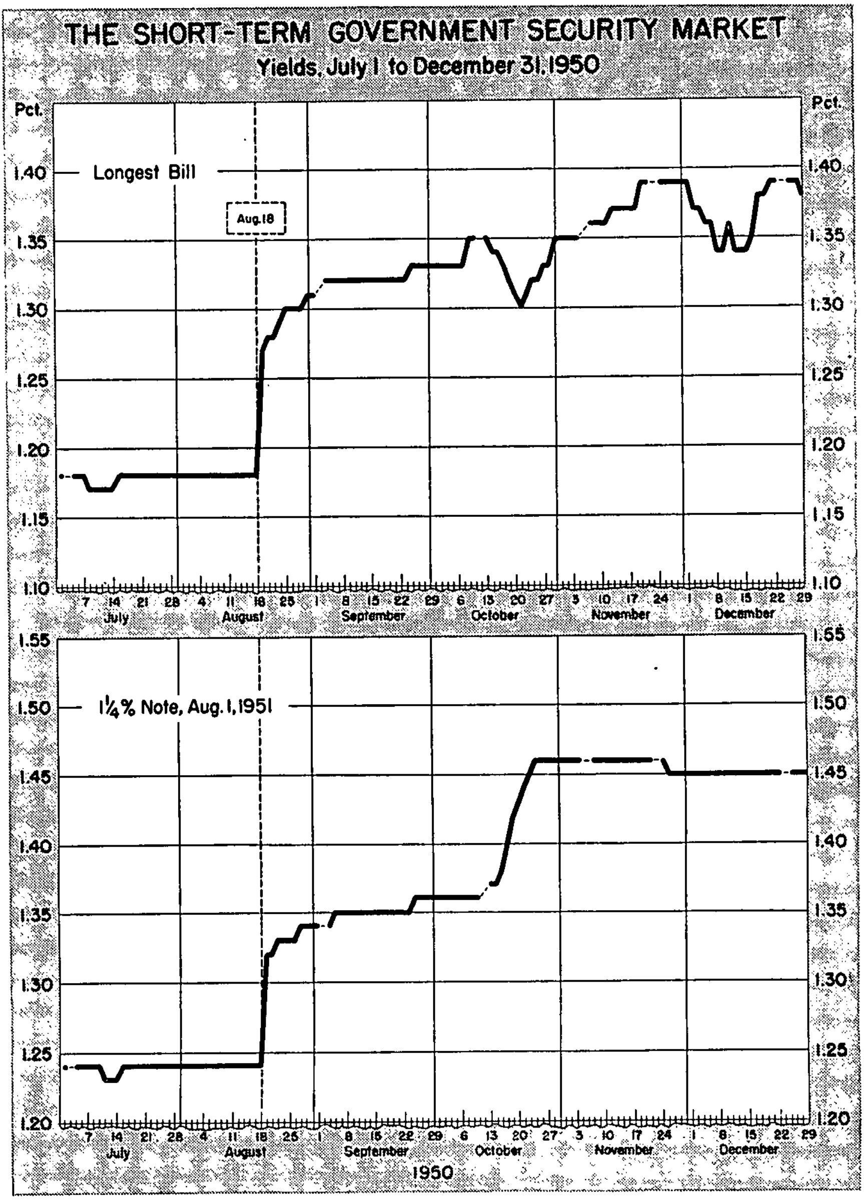
The differences between the two agencies on the necessity for stability in the Government security market became serious in connection with the Treasury's September–October refunding operation. The refunding announcement was made after the close of the market on August 18. The decision to maintain the 1¼ percent rate on the two issues of 13-month Treasury notes offered in exchange for the September–October maturities was in line with the Treasury's policy of maintaining stability in the Government security market. The Federal Reserve was advised of the intended action of the Treasury, which had the approval of the President as required by law.

The terms of the new issues announced on August 18 were identical with the terms of the issues offered in connection with the last previous refunding operation—the refunding of the issues which had matured on June 1 and July 1. Furthermore, the terms of the new issues were in line with the market on the day of the refunding announcement; and met the needs of the market which required a short-term security at that time. This was frequently overlooked in the public discussions which followed in subsequent weeks.

The Federal Reserve System, however, took action to increase the rediscount rate; and immediately after the opening of trading on Monday, August 21, short-term rates on outstanding issues of Government securities were allowed to reach levels inconsistent with the rate on the refunding offering of the Treasury. Subsequently, the Open Market Committee through its open market operations permitted short-term rates to run up further. (See Chart 2.) The Open Market Account offered Government securities at prices which gave purchasers a higher rate of return than they would receive on the new issues offered by the Government. The result was to make the new Treasury issues unattractive to the market. Obviously, most of the holders of the maturing issues did not wait to exchange them for the new refunding issues, inasmuch as they could buy higher-yielding securities of the same type from the Federal Reserve.

The result of the actions of the Federal Reserve System was a significant financing failure for the Federal Government. Some $13½ billion of Government securities was involved. Less than 6 percent of this amount was exchanged for the new issues by private holders. Between the time of the announcement and the dates of the refunding operations, private investors sold over $8 billion of their holdings to the Federal Reserve. Sales of other Government securities from the System's portfolio offset to a considerable extent these purchases of the maturing issues. They did not, however, completely offset the buying operation; and as a result of the Federal Reserve actions, there was a net increase in the System's Government security holdings. In addition to the securities sold to the Open Market Account, private investors turned in over $2¼ billion to the Treas-

CHART 2


THE SHORT-TERM GOVERNMENT SECURITY MARKET
Yields, July 1 to December 31, 1950
Pct.
Longest Bill
Aug. 18
1.40
1.35
1.30
1.25
1.20
1.15
1.10
7 14 21 28 4 11 18 25 1 8 15 22 29 6 13 20 27 3 10 17 24 1 8 15 22 29
July
August
September
October
November
December
1¼% Note, Aug. 1, 1951
1.55
1.50
1.45
1.40
1.35
1.30
1.25
1.20
1950

ury for cash redemption. The cash turn-in was the greatest the Treasury has ever had to finance, and it constituted an important drain on the Government's cash balance.

In the weeks that followed, the Federal Reserve open market operations had the effect of depressing prices on outstanding Government securities further. Then in November, it was necessary for the Treasury to decide upon another refunding offering involving $8 billion of certificates of indebtedness and bonds maturing in December 1950 and January 1951. Because of the decreases in security prices in the intervening period, a higher interest rate was offered than in August in order to price the new issue in line with the market. Holders of the December and January maturing securities were offered 5-year Treasury notes drawing interest at the rate of 1¾ percent per year. The new issue was in accord with the Federal Reserve recommendation to the Treasury at this time. The Treasury was somewhat dubious about the length of this issue because it did not seem particularly suitable for the holders of the maturing issues—who were largely banks, corporations, and other short-term investors. The Federal Reserve, however, thought it was advisable to extend the maturity. The terms of the issue were approved by the President; and the Chairman of the Board of Governors assured the Treasury of the full cooperation of the System in the refunding operation.

On the first trading day after the announcement of the new issue was made, the Federal Reserve permitted the market to go off sharply—notwithstanding the fact that the issue had been proposed by the Federal Reserve and the Chairman of the Board of Governors had assured the Treasury of the System's full cooperation. The exchange experience in this refunding operation—while considerably improved over September-October—was still far from satisfactory. Only 51 percent of the maturing issues was turned in to the Treasury by private holders for the new issues. The Federal Reserve bought over $2½ billion of the maturing securities during the refunding period. Moreover, the cash redemption experience was only slightly better than in September-October. Cash redemptions amounted to 14½ percent of the total of the maturing issues; in the previous operation they had amounted to 17½ percent. This compared with an average on offerings of this type of about 5 percent in recent years.

The net result of Federal Reserve open market operations from August 21, 1950 through the end of the year was an increase in the System's Open Market Account of over $2½ billion. This was debt monetization. It had not existed on net balance in the year and a half prior to August 21, 1950. During that period, the Federal Reserve holdings of Government securities had declined by $4½ billion for the calendar year 1949—to a substantial extent the result of Federal Reserve sales of Government securities to absorb bank reserves released by reductions in reserve requirements—and by an additional $¾ billion from January 1 through August 18, 1950. (Refer to Chart 1, page 251.)

The events just described affected primarily the short- and medium-term issues of Government securities, although there was also some downward pressure on prices in the long end of the market. Early in January 1951, however, officials of the Federal Reserve System outlined to the Treasury a program which would involve a reorientation of debt management policy. The program included proposals for further increases in interest rates, including increases in the long-term area. In view of the importance of these matters to the whole defense financing program and the widespread rumors and confusion in the market, the Chairman of the Board of Governors and I felt that the matter should be discussed with the President. At this meeting the three of us—the President, the Chairman and I—agreed that market stability was desirable, and the Chairman again assured the President that he need not be concerned about the 2½-percent long-term rate on Government securities.

It was against this background that I made a speech on January 18, 1951, before the New York Board of Trade, announcing this policy. The market strengthened following this speech. Then some officials of the Federal Reserve System began to differ publicly with the policy. This created further uncertainties in the Government security market. At about this time, also—on January 29—the Open Market Committee further reduced its buying price for Victory Loan 2½'s—which was the most significant of the long-term Treasury issues, marketwise. With the market situation before him, and in view of the previous conferences with the Chairman of the Board of Governors, the President asked the entire Open Market Committee to meet with him on January 31 to clarify the situation. I was not present at that meeting. Its results as announced to the press created strength in the Government security market for a day or two. Confusion was again injected into the market, however, by statements made by a Federal Reserve official on February 3.

About this time a series of conferences was held between the Treasury, the Chairman of the Board of Governors, the Chairmen of the two banking committees in Congress, and the Chairman of the Joint Committee on the Economic Report. It was generally agreed between the parties involved that there should be no change in the existing situation in the Government security market, and no Congressional hearings held on differences between the Treasury and the Federal Reserve, for a short period while I was in the hospital recuperating from an eye operation.

Shortly after these meetings, however, a change in the Federal Reserve attitude began to be apparent; and the Chairman of the Board informed the Treasury that, as of February 19, the Federal Reserve was no longer willing to maintain the existing situation in the Government security market. It was evident that some new agreement had to be reached, since the proposed Federal Reserve action would intensify the confusion and uncertainty in the market. The Government was approaching a quarterly period when expenditures would exceed receipts; and the President's Budget Message—recently released—projected nearly doubled national security requirements for the coming year, with a sizable deficit in the Government's financial accounts unless large new taxes were enacted. It appeared that the Treasury would have to borrow new money in the market in the relatively near future. This would be in addition to refunding operations which would be in the neighborhood of $50 billion during the calendar year 1951. A confident situation in the Government security market was required.

Representatives of the Treasury and the Federal Reserve were designated, therefore, to work out a way in which differences could be compromised. The result was the accord announced jointly by the

Treasury and the Federal Reserve in a statement released for publication on March 4, 1951. The accord will be described in the answer to the following question.

During this period also, the President—on February 26, 1951—appointed a four-member committee comprised of the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, the Director of Defense Mobilization, and the Chairman of the Council of Economic Advisers to study ways and means to provide the necessary restraint on private credit expansion and at the same time to make it possible to maintain stability in the market for Government securities. The final report of this Committee was sent to the President on May 17, 1951.

18. Describe the nature of the accord between the Treasury and the Federal Reserve System which was announced by them on March 4, 1951.

Throughout the period from August 1950 to February 1951, there were frequent consultations between Federal Reserve and Treasury officials, and on some occasions with the President, concerning the coordination of monetary and debt management policies. These discussions preceded the working out of the accord between the Treasury and the Federal Reserve concerning policies that deal with their related problems.

The following joint announcement was made on March 3, 1951, for publication March 4, by the Secretary of the Treasury and the Chairman of the Board of Governors and of the Federal Open Market Committee of the Federal Reserve System:

> The Treasury and the Federal Reserve System have reached full accord with respect to debt-management and monetary policies to be pursued in furthering their common purpose to assure the successful financing of the Government's requirements and, at the same time, to minimize monetization of the public debt.

This statement reflected agreements that had been reached, following extended discussion between representatives of the two agencies, regarding their mutual and related problems. The presumed area of difference had become greatly magnified in the newspaper and other public discussion and there was urgent need to reassure the public that the Treasury and the Federal Reserve were in agreement as to proper debt management and monetary policies in the situation then existing.

The Treasury and Federal Reserve felt that everything possible should be done to terminate the unwholesome situation that had developed and to coordinate the debt management responsibility of the Treasury with the Federal Reserve responsibility for restraining credit expansion. It was the immediate object of the Treasury to restore conditions in the market that would be favorable to refinancing the large volume of maturing obligations, as well as financing several billions of new money required during the remainder of the year. It was the immediate object of the Federal Reserve to endeavor to curb the unprecedented inflationary loan expansion that had continued uninterruptedly since Korea by minimizing the monetization of the public debt and by making it necessary for member banks to borrow from the Federal Reserve in order to obtain additional reserves. With these basic objectives in view, representatives of the fiscal and technical staffs of the Treasury and the Federal Reserve had been designated to engage in a series of discussions and to formulate a proposal which might serve as a basis for policy decision.

The discussions between the Treasury and the Federal Reserve had made it clear that there were many areas of agreement between the Federal Reserve and the Treasury with respect to the solution of these problems; that the cooperation between the Treasury and the Federal Reserve had been of exceptionally high order on most matters of mutual concern; that there are bound to be differences of opinion now and then between agencies, as there are between individuals in the same agencies; but that such differences could be diminished by closer, regularized liaison with respect to mutual problems. It was agreed that there were both immediate and long-run factors which had to be taken into account in arriving at an accord, and that the purpose of the negotiation was to reach agreement upon policies that would reduce to a minimum the monetization of the public debt without creating an adverse market psychology with reference to Government securities.

First, consideration was given to the matter of long-term bonds overhanging the market and at the time being offered for sale daily in large amounts. It was agreed that a substantial portion of these bonds could be taken off the market by a Treasury offer to exchange for them a nonmarketable 2¾ percent, 29-year bond, redeemable at the holder's option before maturity only by conversion into a 5-year marketable Treasury note. The purpose of offering this new security, as announced by the Treasury, was to encourage long-term investors to retain their holdings of Government securities, in order to minimize the monetization of the public debt through liquidation of outstanding holdings of the Treasury bonds of 1967–72. The Federal Reserve agreed to help the Treasury in explaining to large institutional investors the nature and purpose of this new issue. The extent of the acceptance of the offering testified to the success of this joint endeavor.

Second, there was the problem of the long-term Government securities which private holders might try to sell on the market after the terms of the exchange offering became public. It was agreed that a limited volume of open market purchases would be made after the exchange offering was announced; and that if sales on the market were excessive, the situation would be assessed daily, the market would be kept orderly, and open market purchases, if any, would be made on a scale-down of prices.

Third, the pending task of refunding the large volume of short-term securities maturing or callable in the near future presented difficult problems both for the Treasury and for the Federal Reserve. It was agreed that the Federal Reserve, in order to minimize monetization of the debt, would immediately reduce or discontinue purchases of short-term securities and permit the short-term market to adjust to a position at which banks would depend upon borrowing at the Federal Reserve to make needed adjustments in their reserves. This contemplated a level of short-term interest rates which, in response to market forces, would fluctuate around the Federal Reserve discount rate. It was expected that during the remainder of the year the Federal Reserve discount rate, in the absence of compelling circumstances not then foreseen, would remain at 1¾ percent and that the Federal Reserve would operate to assure a satisfactory volume of exchanges in the refunding of maturing Treasury issues.

Fourth, the raising of new funds by the Treasury to finance the defense mobilization program presented other problems. It was recognized that there were no substantial amounts of nonbank funds seeking investment, and that it would be some time before such funds would accumulate. It was agreed that more frequent conferences between the Treasury and Federal Reserve officials and staff should be held so that the Federal Reserve might collaborate more closely with the Treasury in working out a joint program of Government financing as well as in maintaining orderly markets for Government securities.

NOTE.—This reply is the same as that submitted by the Chairman of the Board of Governors of the Federal Reserve System in answer to the question about the accord asked of him.

19. Have there been fundamental differences of *economic objectives* between the Treasury and the Federal Reserve System since the time you became Secretary of the Treasury and, if so, what have they been?

Throughout my administration as Secretary of the Treasury, and I believe through the administrations of my two predecessors as well, the Treasury and the Federal Reserve System have generally agreed on the fundamental objectives of debt and credit policy—to promote sound economic conditions in our free enterprise economy and to avoid the excesses of depression and inflation, to provide the funds needed to finance Government expenditures beyond tax revenues, to reduce the public debt whenever possible, and to facilitate the refunding of the large volume of debt coming due each year.

How best to promote stable economic growth through credit and debt policy while meeting the fiscal requirements of the Government is a very complex and difficult problem. Many different considerations and interests are concerned. Outside expert opinion, upon which both the Federal Reserve and the Treasury officials have called, has often differed widely. It is thus not surprising that there have been occasions on which the Treasury and Federal Reserve have also differed with respect to the wisdom and timing of particular measures.

The Treasury has always, during the period of my administration, carefully appraised the credit policy implications of its debt management decisions; and Federal Reserve officials have considered the debt management implications of their credit policy decisions. Broad objectives have been generally agreed on; sometimes there have been disagreements as to specific measures of action but, in my judgment, the differences that have arisen between the two agencies are differences that might have arisen in any responsible over-all analysis of credit-debt management problems by a qualified group of experts looking at the problem from different vantage points.

20. Except as previously described, what differences with respect to procedures and techniques have arisen between the Treasury and the Federal Reserve System since you became Secretary, or earlier?

The answers to Question 17 and to other questions in this series describe the relationship between the Treasury and the Federal Reserve in recent years in the matters of policy determination and of relationships in the fiscal, monetary and debt management fields. Matters of techniques and procedures have been intertwined invariably with matters of policy and are covered, therefore, in the answers to preceding questions.

During World War II—which was before my term of office as Secretary of the Treasury—this same situation of closely interrelated responsibilities and working relationships existed between the Treasury and the Federal Reserve. During that period, the Federal Reserve and the Treasury appear to have agreed on most of the fundamental objectives to be attained and on most of the steps to be taken in attaining them.

In such a complex set of problems as were involved in financing the war effort and avoiding inflation, however, it was inevitable that there would be differences of opinion between well-informed men on many of the particular details of programs and on the specific steps to be taken and their timing. For example, there was complete agreement between the two agencies that sales of securities to the banks should be held to a minimum. But I understand that the decision as to just what level of excess reserves in the commercial banks was required to assure adequate funds to the Treasury and simultaneously to avoid facilitating unnecessarily large bank purchases of Government securities was apparently a recurring subject of debate at the detailed day-to-day operating level. Similarly, I have been informed that it was agreed that the various War Loan Drives should be handled so that there was a minimum of speculative buying by purchasers who intended merely to sell out at a profit after a few days or months. Here again, the detailed steps to be taken to minimize such speculative buying and prevent the attendant profiteering were the subject of numerous differences of opinion at the operating level.

I mention these examples, not because they represented vital or major differences between the two agencies, but to illustrate the types of problems which will always arise in day-to-day operations and which will always need to be settled by informal interagency cooperation and consultation. There are no pat formulae or simple rules that will give the answers to all such cases, nor is all the wisdom on such difficult and complex operating matters centered in either the Treasury or the Federal Reserve.

During World War II, also, there were some disagreements as to procedures and techniques which illustrate another kind of problem outside the area of basic policy objectives. One case that I have been informed of concerns the differences that arose in 1943 as to the form of organization to be used in handling the War Loan Drives.

In early 1943 there were two groups of people promoting the sale of Government securities. There was the War Savings Staff, which concerned itself primarily with the promotion of Series E savings bonds. It was a Treasury organization organized on State lines and headed by Treasury-employed State administrators. There were also the Victory Fund Committees. These were joint Treasury-Federal Reserve organizations, established along Federal Reserve District lines. The President of each Federal Reserve Bank was ex-officio chairman of the Victory Fund Committee in his District. The Secretary of the Treasury was chairman of a committee of Federal Reserve Bank presidents; but the Chairman of the Board of Governors acted as the liaison man between the Treasury and the Federal Reserve, and the presidents of the Banks regarded him and the Board as their source of instructions.

Rivalry developed between the field forces of the War Savings Staff and the Victory Fund Committees during the Second War Loan; and there was substantial disagreement between the Treasury and the Federal Reserve as to the future method of procedure. The ineffectiveness of assigning sales quotas by Federal Reserve Districts loomed up as an insurmountable difficulty, in view of the large amounts of money needed and the necessity of stimulating a patriotic response involving appeals along State and local government lines. The matter came to a head in the spring of 1943, after which the Secretary merged the War Savings Staff and the Victory Fund Committees into a new organization called the War Finance Committee, directly responsible to him. The new sales organization involved a War Finance Committee in each State, operating under the direction of a chairman reporting to the newly created War Finance Division in the Treasury.

Another case of disagreement arose between the Treasury and the Federal Reserve in late 1943 and early 1944 when the responsibilities of war financing became heavy, and the Secretary of the Treasury felt that in the exercise of his duties he needed the help of every sector of the national community. The Secretary at this time was called upon to raise huge sums of money—amounts in the magnitude of $10 to $20 billion two or three times a year. The size of the operations involved was far beyond anything ever tried before. Sales had to be made to 20 million or 30 million separate purchasers in each drive through the use of a war loan organization involving as many as 6 million volunteers.

The Secretary felt that these tremendous operations could be carried on only after he had given every step in the procedure the most careful consideration. With this in mind, he called upon a large number of bankers, insurance people, promotion experts, educators, advertising executives, and sales managers of all types for advice and counsel. He also called upon the individual presidents of the Federal Reserve Banks and individual members of the Federal Reserve Board for their personal advice and counsel to him during this period of great responsibility. The Secretary felt that he could best obtain their advice and best gauge their feelings through informal conferences with these men as individuals, and such meetings would allow him the best opportunity to express his own reactions to the comments and views presented to him.

The Chairman and the Vice Chairman of the Federal Open Market Committee disagreed with the procedure. They felt that all Federal Reserve comments to the Secretary should be submitted through them. The disagreements on this account culminated in a letter addressed to the Secretary on March 25, 1944, setting up unilaterally a method of procedure. The letter was as follows:

> In order to improve the procedure for presenting Federal Reserve recommendations to the Treasury in regard to important matters of Government financing, the members of the Federal Open Market Committee have agreed unanimously that such recommendations should be presented to you through the Chairman and Vice Chairman of the Committee.
>
> It was felt that this procedure would be helpful from the standpoint of the Secretary of the Treasury as well as that of the Federal Reserve, and that the System's responsibilities under the law in connection with open-market policy could best be met if, before reaching final decisions on financing matters, the Secretary of the Treasury were to give the Federal Open Market Committee, or its Executive Committee, an opportunity to consider the recommendations obtained from staff and outside sources before presentation of Federal Reserve views. It was agreed that, whenever practicable, Federal Reserve recommendations should be submitted in or following conferences between the Secretary and

the Under Secretary of the Treasury and the Chairman and Vice Chairman of the Federal Open Market Committee, which should be held after staff meetings and after meetings with private bankers and others.

The considerations underlying the recommendation of this procedure may be summarized as follows:

The Federal Open Market Committee is a statutory body created by Congress and empowered to direct and regulate the open market operations of the Federal Reserve Banks. Under the law, the time, character and volume of these open market operations must be governed with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation of the country. No Federal Reserve Bank may carry on open market operations except in accordance with the directions of the Committee.

Under existing conditions, the objectives of open-market policy must be and are to provide the reserve funds required for the orderly functioning of our money and banking system and to maintain a general credit situation which will facilitate Treasury borrowing necessary to finance the war. The System has undertaken to maintain conditions in the Government security market which will be conducive to the continued success of Treasury financing on the present general basis of yields. The means of accomplishing these objectives are ordinarily the purchase and sale of Government securities in the open market.

The Federal Open Market Committee, in discharging its responsibilites is, therefore, of necessity a participant with the Treasury in the maintenance of the market for Government securities and in the problems of war financing. Its responsibility is that of a public body which has a greater concern than any group or persons outside of the Treasury in the timing of Treasury offerings, the types of securities offered, and their terms and conditions because of the importance of relating current financing to credit and monetary policies.

It has been customary for the Secretary and Under Secreary of the Treasury to request the members of the Executive Committee of the Federal Open Market Committee to confer with them, or with members of the Treasury staff, on matters of financing policy and procedure. These have invariably been informal meetings with the individual members of the Executive Committee rather than formal meetings with the Executive Committee as such. In these conferences the members of the Executive Committee at times have given their individual views and recommendations, at times they have spoken for the Executive Committee, and at other times for the Federal Open Market Committee. In addition the Treasury at times has requested the individual views of Federal Reserve Bank presidents.

In view of the System's statutory responsibility and the importance of the matters involved, the Committee felt that the discussions with the Treasury should be on a more clearly defined basis, and that this would be accomplished by having the Chairman and Vice Chairman of the Federal Open Market Committee recognized as the appropriate representatives through whom to present all Federal Reserve recommendations, written or oral, to the Treasury on important matters of financing policy. It was felt also that better results would be obtained by presenting such recommendations in conferences with the Secretary and Under Secretary of the Treasury alone, after whatever conferences are held by the Treasury with others at the staff or technical level, and after whatever meetings are held by the Secretary and Under Secretary with advisers or consultants, such as private bankers and Government security dealers, who are without direct public responsibility. In making their recommendations, the Federal Reserve representatives would thus be able to take account of information obtained from these sources.

The Federal Open Market Committee authorized its Executive Committee, through its Chairman and Vice Chairman, in so far as it is practicable, to follow the procedure outlined above. If you so desire, Mr. Sproul and I will be glad to discuss this procedure with you at your convenience.

The Treasury would have preferred the former arrangements, which permitted freer discussion and better presentation of opinions in controversial matters among the four groups involved—the Board of Governors of the Federal Reserve System, the System's Open Market Committee, the individual Federal Reserve Banks, and the Treasury. The Federal Reserve decision prevailed, however, and was still in effect when I became the Secretary of the Treasury in 1946.

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The foregoing examples refer to the situation during the war; and there is no doubt that matters of procedure and technique can be a source of serious disagreement in periods of great activity or emotional strain. This is particularly true when responsibilities are divided four ways, as mentioned above. Each one of these groups has a different background of judgment and experience, and it is quite unlikely that the views of the four groups on matters of procedure and technique would coincide at all times.

21. How closely have the Treasury and the Federal Reserve System cooperated in matters of common interest?

The Treasury and the Federal Reserve System have cooperated very well in matters of common interest. The nature of this cooperation has already been described to a large extent in reply to several earlier questions.

Cooperation does not necessarily mean unanimity of opinion on every problem. Nor does it mean the suppression of differences to promote one view as against another. Cooperation, to be effective, means a willingness to sit down at the conference table and to work out the problems of the day in a spirit of give and take. By this standard, the cooperation between the Treasury and the Federal Reserve has been very good.

It may be interesting to the Committee to know more exactly how the Treasury works with the Federal Reserve in its day-to-day problems. The Treasury cooperates in the following ways: (1) by keeping the Federal Reserve currently informed with respect to its forecasts of receipts, expenditures, and Treasury balances; (2) by consulting with the Federal Reserve with respect to amounts and terms of proposed public debt offerings; (3) by currently (twice a week) consulting the Federal Reserve with respect to its calls on tax and loan accounts in commercial banks for deposit in the Federal Reserve Banks; (4) by consulting the Federal Reserve with respect to purchases and sales in the market for Government investment accounts; (5) by consulting the Federal Reserve with respect to proposed offerings by other agencies of the Government; and (6) by interchange of views on general economic and other matters. The Federal Reserve consults with the Treasury in many similar ways and keeps it informed as to its operations.

22. Describe the mechanism by which a general tightening or easing of credit, and the changes in interest rates which may result, is expected to counteract inflation or deflation. Discuss the impact on borrowers and lenders in both the short-term and long-term credit markets and on spending and savings. Indicate the effect on each of the broad categories of spending entering into gross national product. What are the (actual or potential) capital losses or gains that would be brought about by changes in interest rates? To what extent is the effectiveness of a program of credit restraint affected by or dependent upon expectations with respect to subsequent changes in interest rates? Distinguish in your discussion between small changes in rates and large changes in rates.

A full answer to this question would require a very lengthy exposition. It is extremely difficult to evaluate the impact of a general tightening or easing of credit on various sectors of the economy. A given action may produce one set of results under certain circumstances and another set of results under other circumstances. For our present purposes, it will be necessary to touch very generally on each of the more important aspects of the question, and to present a minimum of refinements, qualifications, and details. Furthermore, in order to simplify the presentation as much as possible, the discussion has been exemplified mainly by reference to an inflationary situation, in which credit restraint rather than credit ease is desirable. Such a situation has prevailed during most of the period following the close of World War II.

1. The Mechanism by which a General Tightening or Easing of Credit Is Expected to Counteract Inflation or Deflation

The goal of an anti-inflationary program is to keep the total spending of the economy as nearly in line as possible with the volume of goods and services which our physical resources, manpower, and productive organization are able to supply. The role of tighter credit in such a program is that of reducing the willingness and abiilty of people to spend. This occurs in two ways: (1) the willingness and ability of lenders to lend and of borrowers to borrow for current spending are reduced; and (2) securities become less readily salable and this tends to reduce the liquidity of their holders.

In our system of commercial banking, the individual banks make loans to their customers and thereby expand purchasing power and spending in the economy. Commercial banks as a group manufacture credit as they make such loans. An individual banker may not feel that his bank is adding to the money supply because it can only loan funds which it already has had entrusted to it by depositors. But all commercial banks as a group do create credit. We do not need to consider the whole process here, but if loans and investments of all commercial banks as a group rise by, say $10 billion, the deposits of all commercial banks will likewise rise by $10 billion.

The creation of deposits by banks is, of course, limited by the reserve requirements that are levied by the Federal Reserve System against the deposits of commercial banks which belong to the System and by the customary or legal reserve requirements that are applicable to other banks. Member banks are required to carry such reserves in the form of deposits in the Federal Reserve Banks. To the extent that the Federal Reserve is able to influence the aggregate volume of member bank reserves, it is also able to influence the volume of credit extended by the banks and the interest rates thereon. It may be noted, however, that it is easier to force a contraction than to encourage an expansion.

In practice, the Federal Reserve System has used a variety of mechanisms over the years to influence the volume of member bank reserves. At first, it exercised its control primarily by raising and lowering the price at which it was willing to lend reserves to the banks. That is, the discount rate was lowered and raised with the view that changes in this price would (1) signal a change in the Federal Reserve's willingness to extend credit to member banks, and (2) alter the banks' willingness to borrow reserves. This, in turn, would affect the banks' willingness and ability to make loans to their customers.

During the decade of the 1930's, the rediscounts and direct advances of the Reserve Banks to member banks declined to negligible amounts as bank reserves were increased tremendously by the inflow of gold. The discount rate, in consequence, lost most of its direct influence during the period.

During the Twenties, the Federal Reserve began to use open market operations as an instrument for exercising general credit restraint. During the Thirties, increases in reserve requirements were also used to effect credit restraint. In recent years, these two devices have been the principal ones used for general credit control operations.

Open market operations by the Federal Reserve affect bank reserves in general in this way (minor variations of the process are excluded for simplicity of presentation): When the Federal Reserve buys securities on net balance, it pays for them by extending a deposit on its books. The new deposit will go to a commercial bank since the public cannot hold Federal Reserve deposits. This means that the reserves of the commercial banking system held in the Federal Reserve will be enlarged. Conversely, when the Federal Reserve sells securities on net balance, it reduces the reserves of the commercial banking system.

The growth of the public debt (as explained in the answer to Question 30) has introduced a new factor which complicates Federal Reserve efforts to influence the volume of bank reserves as a means of influencing in turn the volume of bank lending to private borrowers. The commercial banks now hold a large volume of Federal Government securities, a substantial portion of which is short-term and some of which matures continuously in the form of Treasury bills. Some of these holdings represent highly liquid secondary reserves to the commercial banks which they may attempt to liquidate to acquire additional cash reserves if needed. If the market is weak and it is difficult to sell securities, the banks may turn in a larger than usual volume of maturing Treasury issues for cash instead of accepting a Treasury refunding offer. By this means they will obtain additional loan funds immediately as the Treasury pays out cash.

So long as banks possess large amounts of early maturing Treasury securities, they feel that they can always obtain substantial funds for further loan expansion. It is true, of course, that if the banks let their securities run off at maturity, the Treasury must find funds with which to pay holders of maturing issues. An important factor here is the sources of funds which the Treasury is able to tap at the time. Bankers tend to feel that the Treasury is always able to obtain the required volume of funds—and place great reliance on the convertibility of their Government securities for loan purposes.

As I noted earlier, the role of tighter credit in an inflationary period is to curb spending by reducing the ability and willingness of banks (and nonbank lenders) to lend to private borrowers and the willingness and ability of private borrowers to borrow. A reduction in the volume of private credit (or even a decline in its rate of expansion) tends to bring about a greater than dollar-for-dollar reduction in total spending. Not only are would-be borrowers prevented from spending the funds they had hoped to borrow, but other persons, who had expected to sell goods or services to would-be borrowers are not able to make those sales at expected prices and are forced to curtail their own spending. Business liquidity is lessened through slower collection of receivables and reduced availability of credit. The liquidity of securities held as secondary reserves tends to be reduced and long-term lenders are inclined to be more cautious in extending loans. The financial markets, including those for equity issues, are likely to be depressed; and it may become more difficult to sell new issues of all types. However, these effects may be offset to some extent by an increase in the velocity of circulation; that is, individuals and businesses as the result of the increased cost or decreased availability of credit may be willing to reduce their own cash balances.

It is clear that there can be a whole chain of effects stemming from a restrictive credit policy; this may cause such a policy to be *too* effective—to stimulate forces which can bring on a business recession. For this reason, credit restriction, when needed, should be undertaken with great caution and delicacy. This is particularly important now when a large public debt has added many new problems for our economy.

Easy credit, and credit expansion, are unlikely to produce inflation when a substantial amount of unemployment exists. In those circumstances, the additional spending which may be generated by easier credit mainly promotes fuller employment of our resources, though some price increases may also take place. In point of fact, however, increasing the availability of credit has not proved very effective for overcoming deflation once this condition has arisen. The principal reason for this is that in bad times potential business borrowers are not sufficiently confident of profit possibilities to seek borrowed funds. Even a zero rate of interest is no bargain if a man feels that he may lose part of the principal of any loan he gets.

The danger that easy availability of credit will produce inflation is greatest when substantially full employment and utilization of the Nation's resources exists, for a further increase in total spending under those circumstances cannot increase output materially, and tends to push prices upward instead.

2. The Impact of a General Tightening or Easing of Credit on Borrowers and Lenders

On the whole, it would appear that the more important immediate effects of general tightening or easing of credit are likely to be on the willingness or ability of lenders to lend rather than upon the willingness of borrowers to borrow; and that long-term credit is more responsive to control measures than short-term credit.

(*a*) *Borrowers.*—Turning first to the question of the effects of a general credit restraint on borrowers, the following generalizations may be made:

(1) Long-term borrowers are probably much more seriously affected by a program of credit restraint than short-term borrowers. Uncertainty stemming from credit restraint may tend to have significant effects on the long-term security markets. Sales of securities which could formerly have been satisfactorily arranged may have to be withdrawn, particularly in the immediate period of disturbance created by the new credit restraint. Borrowers may wish to postpone programs in order not to go into disturbed markets when reception may be poor and when interest rates may jump more than expected. Short-term borrowers may also tend to postpone some projects, but

the effect is not likely to be as severe as in the case of longer-term projects. Uncertainty, however, is likely to be a permeating influence if the credit restraint program is taken seriously.

(2) The subject of the influence of interest costs in a program of credit restraint is a very controversial one. There are indications that short-term borrowers are likely to be less deterred in going ahead with projects even though interest costs have risen than is true in the case of long-term borrowers. An increased interest rate to carry an inventory loan, for example, would not seem to be as important a factor as an increase in the interest rate for a long-term public utility loan or a mortgage for residential housing. Assuming that the credit is available in each case, but at an increased rate of interest, the short-term borrower would be much more likely to go ahead than the long-term borrower, although there would be bound to be exceptions either way. Conversely, a program to ease the volume of credit and reduce interest rates would seem to me to have more stimulating effects in the case of long-term projects than in the case of short-term loans, such as those designed to carry inventories.

(3) One of the results of a program of credit restraint may be to affect the timing of loans—particularly long-term. If the credit restraint results in what is expected to be a temporary tightness in the money and investment markets, some borrowers may postpone their borrowing for such period as they think necessary in order to undertake the transaction under more favorable circumstances, and possibly at lower interest rates. On the other hand, there may be some tendency to anticipate future borrowing needs, if a period of credit restraint is considered imminent, in order to raise funds under more favorable circumstances and at lower interest rates than might prevail later on. The question of the effects of expectations of changing interest rates is discussed more fully in a later section of this answer.

(*b*) *Short-term Lenders.*—Short-term lenders, primarily commercial banks, may respond to credit restraint in various ways, as indicated by the following observations:

(1) Bank credit may be rationed to various borrowers. Lines of credit may be reduced, and loans may receive more careful scrutiny. Although willing to pay the rate charged by the bank, the borrower may not get the full amount that he would like to borrow. The relative scarcity of credit and its price, therefore, may not be as closely related as in the case of merchandise. This circumstance creates the possibility of credit restraint without a proportionate rise in interest rates.

(2) Banks will usually try to accommodate customers who have banked with them for a long time, even when approaching a loaned-up position, or they may try to develop certain new customers for long-term business reasons. Because of these and other influences working in the same direction, banks may seek to offset tightness in reserves by the following means:

(*a*) They may let short-term Treasury securities run off at maturity instead of accepting a refunding offer. Thus the banks may acquire funds for loan expansion in this way even if the Federal Reserve is not buying securities in the market in significant amounts. (As was noted earlier—if the banks let their securities run off at maturity, the Treasury must find funds with which to pay the bank holders of maturing issues; the controlling factors here, therefore, are related to the sources of funds which the Treasury is able to tap at the time.)

(*b*) The banks may obtain reserve funds by borrowing from the Federal Reserve. There has been some reluctance on the part of banks to be in debt to the Federal Reserve, but it is possible that certain developments of recent importance may have weakened this reluctance. Among these are (1) the fact that the excess profits tax law often makes it more profitable for banks to borrow rather than to sell securities, (2) the possibility of borrowing at par on bonds quoted below par, which makes these securities more desirable for use as collateral than for sale, and (3) the fact that the interest cost of borrowing reserves may be less than the interest earnings which would be given up if securities were sold to raise funds.

(*c*) *Long-term Lenders.*—In the case of long-term lenders, the following observations may be made with respect to general credit restraint:

(1) Lending may tend to be slowed up because of the uncertainties brought on by credit restraint. There may be some tendency to restrict credit to the better quality borrowers, and lower quality borrowers may find that they will have to postpone projects as a result.

(2) Prospective capital losses on existing holdings of long-term securities may exercise some influence in slowing down or preventing a shift of assets into new investments of greater profitability. Also, a weakening bond price structure may tend to reduce the liquidity of secondary reserves for many investors, thus strengthening the factors making for a retention of present assets.

(3) The prospect that interest rates may rise as a result of the credit restraint may also tend to postpone loans because lenders might wish to place long-term funds at the expected higher rates when they materialize. Yet, given the pressure to earn a steady rate of return, life insurance companies and mutual savings banks cannot indefinitely postpone investment of new money or of money becoming available from repayments or maturing obligations; eventually practically all funds must be employed.

(4) As noted earlier in this answer (and discussed at greater length in the answer to Question 30), the tremendous growth in the public debt has extended the area of influence of the Federal Reserve through providing a medium for open market operations which reaches long-term investors as well as short-term investors. Since World War II, it has always been necessary, in conducting open market operations, to weigh the risks of producing severe and unwanted repercussions throughout the financial structure as the result of disturbances in the Government bond market.

3. The Impact of General Tightening or Easing of Credit on Spending and Savings

The impact of general credit control measures on total spending depends in large part on the impact which such measures have, in the first instance, on lending and borrowing operations. The possibilities and limitations of general credit controls in this respect have already been discussed in the immediately preceding section. It is obvious, of course, that spending programs which cannot be carried out except on the basis of borrowed funds are most sensitive to credit control measures. Spending plans for which the funds are already available may be indirectly affected, however, either because of secondary effects of curtailed programs or if the credit control measures adopted are associated with a change in the general business outlook. The effects of a general tightening of credit on specific categories of spending are discussed further in the next section of this answer.

Certain aspects of the effect of changes in interest rates on the willingness to save and on investment policies are discussed in the answer to Question 26, which is concerned with the effect of changes or prospective changes in interest rates on the demand for Government securities. It is pointed out in that answer that both businesses and individuals frequently save for reasons quite unrelated to the expectation of interest income. Also there are instances when low rates develop more saving than high rates. A given annuity costs more when interest rates are low; the purchaser of an annuity might be induced by low interest rates to save more to achieve the minimum retirement annuity he felt he needed. He might, on the other hand, have to give up saving in this way entirely if annuity costs increased to greatly.

It should be noted that changes in the total volume of saving in the economy at any given period are the result of two factors: (1) new additions to savings (gross), and (2) the spending of old savings or the incurrence of debts for various purposes. To arrive at net savings, these positive and negative factors must be added together. It is possible that negative savings might be reduced by a program of credit restraint, and to the extent that this occurs the aggregate volume of net saving in the economy will be increased.

When savings funds have already been accumulated and the choice is between alternative investments, there may be a tendency to choose investments bringing higher returns, providing the degree of risk is not greater than the investor is willing to take. However, custom and convenience play a large part in investment decisions. "Automatic" devices for the regular investment of savings, such as payroll deductions, have an attraction for many investors which is only slightly affected, if at all, by interest rate comparisons between these and other investment outlets. Expansion of savings through payroll deductions is the principal reason why the number of $25 denomination Series E savings bonds sold in the calendar year 1951 was 17 percent higher than in 1950; it is also an important reason why E bonds outstanding today are at an all-time peak of $34¾ billion. (See the answer to Question 34 for further discussion of this point.)

4. The Effects on Each of the Broad Categories of Spending Entering into Gross National Product

The question here is the effect of general credit restraint on the various segments of the gross national product. It is almost impossible to analyze the gross national product in this way with any degree of certainty. It is clear, of course, that if the Federal Reserve uses general credit restraint to reduce the volume of loans being made in the economy, capital spending is likely to be most affected, inasmuch as this type of spending usually depends heavily on credit. Residential housing, for example, involves a tremendous amount of borrowed funds. Similarly, plant and equipment expenditures by business may require an extensive amount of borrowed funds.

Yet, a program of general credit restraint would not hit uniformly at capital spending, and would not be as effective today, in all probability, as it would have been a generation ago. As noted in the answer to Question 31, many economic changes have taken place in recent years which together serve to make traditional general credit controls less effective than formerly. Among these is the fact that business is now able to "self-finance" a large proportion of its capital needs. Also, to the extent that the Government makes commitments to purchase or advance funds on insured or guaranteed mortgages (FHA and VA), these loans are less subject to general credit restraint. Furthermore, the various savings institutions now have a large inflow of funds from savers each year; and they are under continuous pressure to make new loans and acquire new investments.

Capital outlays by State and local governments likewise are financed to a large extent by loans. A program of general credit restraint might, therefore, retard such loans, particularly if it led to a weak bond market. This, in turn, might make new issues of securities so hazardous to underwriters that the State and local offerings would be postponed, and rising interest rates in the long-term area might make certain projects too costly to undertake. On the other hand, many State and local government construction projects—such as schools, hospitals, sewers, etc.—are so essential today that there would be a great effort to carry them through, even though availability of credit were being reduced.

Business spending to enlarge inventories typically involves a fairly extensive use of credit—largely short-term bank loans. A tight situation in bank reserves could presumably hold down such loans, although rising interest rates under such circumstances would probably not exercise any significant restraint on the demand for such loans. If the Federal Reserve tightened bank reserves enough, and banks could not compensate by liquidating short-term Treasury securities, inventory loans would tend to suffer. Finally, consumer spending on durable goods is financed to a significant degree by the use of credit. General credit restraint might have some depressing effect on these loans, but it has been found that selective credit controls are more helpful in holding down consumer spending on durable goods.

The major remaining sectors of the gross national product are purchases of goods and services by the Federal Government, the operating expenses of State and local governments, and consumer expenditures on nondurable goods and services. The expenditures of the Federal Government are determined by Congressional actions, so these expenditures are not affected directly by whatever credit policies may be adopted. Expenditures by State and local governments other than capital outlays are also typically determined independently of credit conditions. Consumer spending on nondurable goods and services is generally not hit directly by reduced credit availability, but may be affected through the secondary effects stemming from other sectors. In the last analysis, nearly all categories of private spending tend to be affected in some degree by reduced availability of credit because of the close inter-relation between the different streams of expenditures.

5. Capital Gains and Losses (Actual or Potential) that Would Be Brought About by Changes in Interest Rates

The argument is sometimes advanced that moderate tightening of credit, with small changes in interest rates, will influence lenders significantly because of the capital losses which develop on their portfolios. In some instances, investment managers are undoubtedly reluctant to show realized losses to their boards of directors; in other cases, the fear of even greater losses from a declining market may cause more liquidation. Under existing bank examination procedure, high-grade securities may be carried at cost even if the market price is lower, and this may lead to holding when losses begin to develop.

Different investor classes may react quite differently to the question of capital losses and to the question of whether they should be realized by the sale of the securities involved. Commercial banks may not be as vulnerable to such losses since they hold largely short-term securities which are more stable than long-term issues. Institutional investors other than banks may be much more afraid of capital losses since they hold largely long-term issues which are subject to much wider price swings than short-term issues as interest rates change.

It may be noted that the influence of losses goes beyond the mere dollar changes involved. The development of capital losses destroys some of the liquidity of the whole portfolio of an investor. On the other hand, an emerging capital gain due to interest rate declines would tend to add liquidity and strength to a whole portfolio.

6. Expectations of Changes in Interest Rates

The answer to Question 26 covers in part the question of the extent to which expectations with respect to interest rates influence the demand for Government securities by nonbank investors. Much of the discussion in that answer is relevant here.

The influence of anticipated further changes in interest rates is more significant in the long-term than in the short-term capital markets. Short-term borrowers and lenders both have little to gain by waiting. Long-term borrowers may delay borrowing if they expect lower rates or may hasten or anticipate future needs if they expect higher rates. Long-term investors or lenders may adjust the average maturities of their portfolios depending on their forecast of future rates, i. e., shortening their maturities when they expect higher rates and lengthening them when they expect lower rates.

The difficulty is that widespread expectations of changes in rates under certain circumstances may have little or no effect on the decisions of important investor groups; or they may have too much effect and may cause repercussions which go far beyond the sectors of the economy which the initial credit restraint was intended to reach. Furthermore, once anticipations of changes in one direction have been established, it may be very difficult to reverse such anticipations and to offset unwanted results.

* * * * * * *

In conclusion, I should like to stress again that this question is a very complex one and it is difficult to generalize as to how the credit mechanism would work and what the probable results would be under certain assumptions. Some of the other questions have an important bearing on this subject and I have referred to them in this answer. It is particularly important to refer to the answers to Questions 30 and 31 for a discussion of how changing conditions have altered the appropriateness and efficiency of traditional Federal Reserve methods of credit control; to Questions 35–36 and 39 for a discussion of proposed methods to tighten bank reserves to restore greater control to the Federal Reserve; to Questions 23–25 for a discussion of general credit tightening, selective credit controls and direct physical controls as methods of coping with inflationary pressures; to Question 27 for a discussion of the advantages and disadvantages of a stable long-term Government bond market; to Questions 28 and 29 for a discussion of Treasury actions and views regarding interest rates; and, finally, to Questions 17 and 18 for a discussion of policy agreements and disagreements with the Federal Reserve in recent years and the nature of the accord reached by the two agencies in March 1951.

23. Evaluate the effectiveness of a general tightening of credit (and the consequent increase in interest rates) in restraining inflation as compared with other factors (*a*) when the principal threat of inflation comes from an increase in private business activity; (*b*) when the principal threat of inflation comes from increased expenditures by the Federal Government.

Questions 23, 24 and 25 are all concerned with the effectiveness of credit controls and should, therefore, be read together. Question 23 is concerned with the effectiveness of a general tightening of credit, Question 24 is concerned with the relative merits of selective credit controls versus general credit restraint, and Question 25 is concerned with how credit controls are affected in the present situation by the use of direct physical controls.

When a general tightening of credit is effective, it operates in the first instance to curb loan expansion. It is this immediate effect which will be given principal consideration here, although it is recognized that general credit controls also may have secondary repercussions through an effect on the liquidity position of investors. It is difficult to evaluate, with any precision, the effectiveness of a general tightening of credit. (See discussion in the answer to Question 22.) Inflation probably can, in principle, be prevented or halted by stringent enough general credit restraint. There is always the danger, however, that measures may turn out to be too severe and may, therefore, have adverse repercussions upon the economy. I might add—as is noted in the answers to Questions 30 and 31—that the use of general credit restraint has been restricted over the years by the growth of the Federal debt and by other significant changes occurring in the economy. In the present answer I am, of course, allowing for these factors.

1. "When the principal threat of inflation comes from an increase in private business activity"

The comparative effectiveness of general credit tightening in curbing an inflationary threat generated by private business activity depends largely upon the other control measures which are undertaken at the same time. In the absence of a defense or war emergency, direct controls over prices, wages, and materials are generally considered to be incompatible with our system of private enterprise. It would be more appropriate to rely on a combination of fiscal and monetary measures. On the fiscal side, this would include adequate taxation, proper debt management, a national savings campaign including savings bonds, and the elimination of all nonessential Government expenditures. On the monetary side, general and selective credit controls, plus the direction of other Government policies, so far as possible, to anti-inflationary ends, would be appropriate.

The following considerations may be noted in reference to general credit tightening in a situation in which the principal inflationary pressures come from an increase in private business activity:

(*a*) General credit control in an inflationary period has as its main goal the placing of over-all restraints on further rises in credit and the money supply—thereby limiting the expansion of total spending. In boom conditions this may mean a direct attack on capital outlays—frequently one of the main causes of booms.

(*b*) If the chief inflationary impulse comes predominantly from special sectors of the economy—such as speculation in commodities or securities, construction, or consumer credit—an attempt to reach these sectors by means of severe general credit tightening may work undue hardships on the rest of the economy without, perhaps, achieving its aim. Selective credit controls would be more effective in attacking individual areas of inflation, although on some occasions there may be some advantage in supporting them with a cautious use of general credit measures.

(*c*) General credit restraint presents certain advantages of easy maneuverability, which serve to complement effective Federal Government budget policy as an anti-inflationary weapon. Budget policy is not always easy to change; past experience has shown that our legislative process does not allow changes to be brought to bear quickly nor recalled soon. There are, nevertheless, certain automatic responses to any given structure of tax rates which may have important anti-inflationary effects in a period of rising income. A combination of effective budget policy, efforts to increase savings, proper debt management, and general and selective credit controls provide more flexibility and strength than reliance on general credit restrictions alone.

(*d*) The prospect that in a business boom the Treasury may have a budget surplus suggests that under such conditions there may be obstacles to increasing taxes further. This may make it necessary to rely more heavily upon general and selective credit controls.

(*e*) A certain amount of general credit restraint in a boom period will help to work against the undermining of the anti-inflationary effects of effective budget policy and of selective credit controls. If the economy has too much money or too much liquidity, an anti-inflationary budget policy might be offset by the ability of many taxpayers to borrow or to draw on liquid assets. Likewise, the effectiveness of selective controls, like Regulation X on real estate and Regulation W on consumer credit, would be cut down if it were made easy to raise money to circumvent these restraints.

(*f*) General credit tightening must be used with caution and restraint when there is a large public debt, and particularly when there is a larger volume of early maturities. (For further discussion, see the answer to Question 30.)

(*g*) The considerations which have been discussed above make it clear that general credit restraint is not an "either-or" proposition. In one sense it represents one of the weights that can be used to hold down the balloon of inflation—or to keep it from rising in the first place. It will seldom be a big enough weight to do the job by itself, and it involves certain problems if we try to rely too heavily on it. The important thing is to achieve a coordinated anti-inflationary program which is reasonably balanced in its impact on the whole economy.

2. "*When the principal threat of inflation comes from increased expenditures by the Federal Government*"

It may be assumed that the expenditures under this alternative are largely for military purposes, and the Government, under such conditions, may be running a deficit. Depending upon the magnitude of the financing problem, credit policy would have to be conducted increasingly with this in mind. Direct controls over prices, wages, materials, and consumption would probably be put into play to support the Government's call on productive resources. Under such conditions, the following may be said about general credit restraint:

(*a*) To obtain a maximum of output in these circumstances, particular areas of the economy need special consideration. Our production goals during the present defense period, for example, are probably achieved better with selective controls than with extensive use of general credit tightening, which might restrict essential defense loans along with nonessential lending. At present, efforts are made through V-loans and other devices to provide credit for firms engaged in defense production when they cannot get credit through ordinary channels. Further efforts are being made through the Voluntary Credit Restraint Program to assure that credit restraint does not interfere with the flow of credit to defense firms. If banks were kept so tight that they rejected a good part of all additional loan requests, there is a possibility that they would first take care of old customers, regardless of whether their work was essential or not, and reject many applications of newcomers, some of whom might be expanding defense firms. In some cases, potential defense contractors would be discouraged in their plans. In other cases, the demands made upon the Government for loan assistance would increase. This would create a prospect of otherwise unnecessary intervention by the Government in the credit machinery of the country.

(*b*) General credit controls certainly must not be used in such a way as to impede the financing of an all-out war.

(*c*) However, some cautious use of general credit restraint may be possible and desirable in order to reduce the strains placed on other control measures during a war or defense emergency.

(*d*) Some degree of general credit tightness may be needed in a defense or war economy to keep interest rates from becoming so distorted by the abnormal investment situation as to create serious problems for certain investor groups (such as nonbank financial institutions) which had adjusted their operations to an earlier level of rates.

24. Discuss the appropriate role of general credit controls and of selective credit controls under each of the hypotheses mentioned in the preceding question. What selective controls do you consider appropriate under present circumstances?

Before discussing the appropriate role of general and of selective credit controls under each of the hypotheses mentioned in Question 23, I should like to summarize briefly what I feel to be the general advantages and disadvantages of these two methods. During most of the period since the close of World War II inflationary tendencies have been present, and I shall therefore direct the discussion mainly to measures undertaken in order to promote credit restraint rather than credit ease. As noted in the answer to Question 22 general credit restraint is a fairly broad instrument that is designed to hold down the over-all volume of bank loans and the money supply. In earlier years the Federal Reserve used changes in the discount rate as the principal weapon of general credit restraint. Such restraint is achieved at the present time mainly through actions to influence bank reserves by (*a*) open-market sales by the Federal Reserve System and (*b*) increases in reserve requirements of member banks. While the first of these methods provides considerable flexibility to the Federal Reserve, selective credit controls have been developed over the past two decades to permit desired actions in particular areas. Three types of selective credit controls are now used by the Federal Reserve: namely, Regulations T and U over stock market credit, Regulation W over instalment credit, and Regulation X over real estate credit. The Voluntary Credit Restraint Program also constitutes a kind of selective control.

Selective controls in combination with general credit restriction have a further advantage over general credit control measures alone by directly covering credit extended by nonbank lenders as well as banks. Thus Regulation W covers all instalment sales whether credit is granted to the buyer by a storekeeper, a bank, or other financial institution. Regulations T and U cover all stock market credit, and Regulation X covers all defined real estate credit whether or not extended by a bank. The principle of broad coverage of all types of lending institutions is important in view of the changes in the economic environment which are discussed in the answers to Questions 30 and 31. Also, as is noted particularly in the answer to Question 30, the growth of the public debt has made it somewhat less practicable to rely on general credit controls alone.

Selective credit controls, however, have certain disadvantages. They involve administrative difficulties and are subject to a certain amount of evasion. If used to block spending in certain areas, the result may be to increase to some degree spending pressure in other areas.

Furthermore, it may be argued that selective credit controls, which are limited to certain types of goods, are in a sense discriminatory in the manner of an excise tax, or involve effects similar to rationing. Consequently, there is often a demand to relax them at the very time when they may be most needed. Finally, the question has been raised whether selective controls are socially equitable in their effect on various income groups.

The programs of Government guarantee of residential mortgage credit and related programs may be thought of as a type of selected credit "control" in reverse. Under inflationary conditions programs of this sort should be re-aligned in harmony with general anti-inflationary goals. Only special cases should be exempted. At present, the extraordinary needs for housing in defense areas merit generous credit insurance and guarantee terms, where these are needed to stimulate necessary construction. But other insurance and guarantee programs need to be restrained so as to reinforce the objectives of Regulation X.

This summary of the general advantages and disadvantages of the two types of credit control mentioned in the question gives some background for the discussion of the use of such measures under various circumstances. I will now turn to a brief résumé of the particular considerations which should be noted under each of the hypotheses relating to the source of inflationary pressures noted in Question 23, as well as in a "mixed" period like the present.

1. "When the principal threat of inflation comes from an increase in private business activity"

General credit restraint and selective credit controls should be used jointly to curb spending in this situation. General credit restraint would help to limit total purchasing power and would thus help to keep over-all capital outlays within the limits of voluntary savings. Selective credit controls would have advantages in helping to concentrate the restraint in credit if particular sectors were expanding too rapidly. They could be used more safely since the risks of "overdoing" it are not as great as in the case of general credit control measures.

2. "When the principal threat of inflation comes from increased expenditures by the Federal Government"

If we were in a war period, credit controls of all types would be far less effective than adequate taxes. There is the further consideration that general credit restraint would have to be used with care to avoid upsetting war financing. The effectiveness of selective credit controls likewise would be subject to some qualification. In some cases, scarcities of specific goods might be so severe as to prohibit all consumer sales, or call for rigid rationing, in which case selective credit controls would not be very helpful. In other cases, selective controls might serve to reinforce physical controls over goods in short supply.

3. In a "mixed" period like the present

With high defense spending, but short of all-out war, general credit restraint should be used to supplement budget policy and direct physical controls to the extent it can be pushed without danger of unwanted repercussions; but in such a situation there is a strong case for selective credit controls. Chief among their advantages is that selective controls over credit extended for consumer buying, house purchases, or security purchases may help hold down credit expansion for these purposes and may make credit available for defense purposes. Also, they help keep scarce materials and manpower from being diverted from military uses and can assist in making physical controls more effective. Selective credit controls can be applied with varying severity without great risk of unintended repercussions outside the area of control; since their effects probably are more predictable than are the effects of general credit controls.

The Voluntary Credit Restraint Program now in force under the authority of the Defense Production Act constitutes a particularly flexible kind of selective credit control. Under this program guidance in the form of general rules, which define desirable and undesirable types of loans, is provided individual bankers and other lenders. The aim of the program is to curtail, insofar as possible, the amount of loans other than those for defense or defense-supporting activities.

The types of selective controls now in effect seem to me to be quite appropriate under present circumstances. Further study of the possibility of expanding the area of selective credit controls may be desirable, however. While there are certain difficulties of administration, it should be noted that the difficulties already overcome also appeared formidable at an earlier time.

25. Do you consider that the current extensive use of Government controls over private construction and over private ability to buy scarce materials has an important bearing upon the effectiveness and appropriateness of general credit controls under present circumstances?

The answer to this question is yes. General credit restraint cannot in itself bring about the proper allocation and utilization of scarce materials that is essential in a defense economy. Direct physical controls such as allocations are much more effective for this purpose when the urgencies of defense production are great enough to make acceptable this limitation on the freedom of our economy.

Even then, however, there are serious objections to placing too much reliance on physical controls. Most materials are substitutable, and demand blocked by controls in one direction is likely to spill over in other directions. In this way new shortages tend to be created, requiring a continuous extension of controls. Materials controls, like other forms of rationing, may serve to repress inflation rather than to prevent it if the unsatisfied demand is allowed to accumulate.

Physical controls over private construction and over materials do not remove the need to hold down excessive purchasing power by a combination of taxation, debt management, a program for the stimulation of savings, and general and selective credit controls. This is particularly true when only moderate reliance is being placed on physical controls, as is the case today in contrast to World War II.

26. To what extent is the demand for Government securities by nonbank investors determined by (*a*) the level of interest rates, (*b*) expectations with respect to changes in interest rates, (*c*) other factors?

There can be no definite answer to this question. There are many different classes of nonbank investors, and these groups and the individuals in them have widely varying investment objectives and problems. There is no general agreement in economic theory as to the relative importance of the factors governing the flow of investment funds to the capital markets; and there is very little evidence on why investors make the choices they do among competing outlets for investment funds. Quite apart from changes in investment opportunities—risk factors, savings objectives, and all the other circumstances entering into investor decisions are constantly changing in relative significance over a period of time; with the result that decisions are likely to be made on one basis at one time and on a different basis at another time. For this reason, generalizations on the factors giving rise to a demand for Government securities are not only difficult but are apt to be misleading unless they are related to specified circumstances and a particular period of time.

In the area of practical policy in which the Treasury must operate, the question of interest rates is, of course, one of the important matters which must be decided whenever a refunding or new borrowing operation is in prospect. Past experience provides many helpful guides. The Treasury makes a continuing study of the money and investment markets, and particularly of the funds available at any given time for investment in Government securities. The flow of income to the various groups in the economy and their spending and saving patterns are analyzed, and a close check is kept on the asset position of the various groups, particularly their cash and secondary reserve positions. On the basis of these analyses, interpreted in terms of our experience with similar operations in the past, the Treasury is able to appraise the extent and nature of the current demand for Government securities, as well as the rate of interest, length of maturity, etc., which circumstances indicate would be appropriate in relation to this demand. The Treasury works closely with the Federal Reserve in making decisions of this nature.

1. The Level of Interest Rates

The rationale has been developed in economic theory that the level of interest rates is one of the most important factors directly influencing the supply of investible funds. High interest rates, it is said, would bring forth a greater amount of funds for investment in all kinds of debt securities; and low interest rates would tend to have the opposite result.

This conclusion is based on the following logic: Recipients of income and holders of investment funds generally have several alternatives in the management of their resources. First, they can spend their funds on currently available goods and services. Second, they can continue to hold money or its equivalent. Third, they can make commitments for investment purposes. Such commitments, it is argued, become more attractive relative to the other alternatives when rates move higher. Therefore, as interest rates increase, a greater proportion of current income will not only be withheld from spending—it will be devoted to investment. In addition, the higher rates obtainable on invested funds may result in the conversion of some part of existing cash holdings into income-yielding assets.

This theory is subject to a number of qualifications, of which the following may be mentioned. First, it does not take account of expectations with respect to changes in interest rates. Second, it does not allow for the impact on potential investors of the numerous other forces which are operative in the economy at any given time—for example, the level of national income and the volume and direction of changes in it.

Third, allowance should be made for the fact that some motives for saving may lead to a smaller volume of saving at higher interest rates than at lower rates. For example, when the major savings objective is the earning of a certain amount of annual income from annuities, the amount of savings necessary to produce the required income is less when interest rates are high than when they are low. This may cause some investors to reduce their current rates of saving. At the same time, there may be other persons who will be induced by the higher rates to try to increase their savings. Both groups would have to be taken into account in any attempt to appraise the net effect of higher rates on the total volume of savings. However, there is reason to believe that the aggregate of savings is much more strongly affected under most circumstances by influences such as changes in the national income than by interest rate considerations of the sort just discussed.

The foregoing discussion is concerned primarily with the aggregate level of savings. It does not necessarily follow, however, that the demand for Government obligations is always closely related to the current flow of savings. To any particular investor group, the relative attractiveness of various investment outlets—as well as the relative attractiveness of saving in any form—tends to be different at different periods. At times, for example, investments in private obligations will tend to take an increasing share of the total funds available in a given group. This is apt to occur particularly when there is an inclination to invest in higher yielding securities such as common stocks, in order to obtain a greater return than can be secured from Government obligations. On the grounds of safety and stability of both income and principal, Government bonds have a steady appeal for many investors. Nevertheless, if the return on Government obligations is low, the proportion of any given portfolio represented by such bonds may be less than would otherwise have been the case. Readjustments may have been undertaken in order to bring the total income up to a level considered necessary for the particular portfolio—a practice which is often described as "reaching for income".

In considering the importance of this factor, however, it must be remembered that interest rates are all interrelated and that rates on Government securities represent a bench mark for other rates. Hence, an increase in the rate on Government securities would generally tend over a period of time to bring about an increase in rates on corporate securities, mortgages, etc. It follows that the tendency to "reach for income" by moving out of Government securities and into higher yielding investments would not necessarily be affected to any significant extent by raising the Government rate. There would probably be some investors who would be influenced by the rate change; but many others might still turn to alternative investments in order to further improve their earnings.

2. Expectations with Respect to Changes in Interest Rates

In the answer to Question 27, there is a discussion of the advantages and disadvantages of a stable bond market. Much of that discussion is relevant to the present question. "Expectations with respect to changes in interest rates" is simply another way of referring to expected changes in the bond market which, of course, raises the question of the possibility of capital gains and losses. Expected changes in interest rates may make bondholders anxious to take corrective action by buying or selling immediately. In addition, they may lead investors to defer or anticipate long-term investment in order to obtain the advantage of a higher rate of interest than would otherwise be obtainable.

Let us take first the case of interest rates showing some tendency to move upward. What would be the probable reactions of investors in their own self-interest? Both a danger and an opportunity would be recognized in this situation. The danger would be that the price of outstanding bonds would decline as interest rates rose and the extent of the decline would be in direct relationship to the length of the period to maturity. As a table of bond values indicates, the longer the maturity the greater the price decline necessary to adjust the issue to a given upward movement in interest rates.

The opportunity would be that investments would earn a higher return in the future. In this situation, the experienced investor would probably try temporarily to shorten the average maturity of his portfolio by decreasing his longer-term securities and reducing his short-term securities so as to reduce his potential losses. Later on, he would reverse this in order to enlarge his prospective future yield.

To the extent that these expectations merely caused a transfer of savings and accumulated resources from long-term to short-term securities, there might be no over-all change in the demand for Government obligations. An increase in the demand for the short maturities would offset the decline in demand for the long maturities. But even near maturities might show some capital losses under conditions of rising interest rates; and this might lead some investors to show a preference for holding cash as against any type of security. Therefore, expectations of higher interest rates would quite possibly mean a net decline in the aggregate demand for Government securities until such time as the investment markets showed definite signs of renewed stability.

If precipitate price declines were expected, there might also be a tendency for investors to withhold funds from the capital markets. This might cause a reduction in corporate expenditures for plant and equipment. To the extent that this occurred, deflationary effects might be felt.

Expectations of lower interest rates would in general involve the reverse of the processes indicated above. Investors would be inclined to lengthen the maturity of their portfolios at once, in order to provide the basis for capital gains. Institutional traditions, however, might limit such action. Banks, especially, regard short-term issues as more appropriate for their portfolios because of their liquidity requirements; even if they expected falling interest rates, banks would therefor be reluctant to make large commtments for long-term securities. (Further discussion of the effect of expected changes in interest rates on investor decisions is found in the answer to Question 22.)

3. Other Factors

Investment decisions are influenced by a great many factors other than the level of interest rates and expectations with regard to changes in interest rates. There is no precise way to evaluate the importance of these factors, but it is clear that some of them frequently overshadow interest rates in importance. For convenience, I will discuss very briefly nine "other" factors which have been important in recent years.

(1) *Safety of Government Securities.*—Most investor classes want substantial amounts of Government securities because of their riskless nature. While the prices of these securities may fluctuate in the market, it is known that full payment of the interest and of the principal at the time of maturity will always be made. Many investors, therefore, carry Government securities as secondary reserves which they increase or decrease in accordance with their needs. Some investors also carry Government securities because in some cases they are the only securities legally acceptable as collateral or as a deposit for a Government contract. The safety of other classes of investments varies tremendously, ranging from those which carry either Government insurance or guarantee (i. e. bank deposits, Federal Housing Administration insured mortgages, etc.) to loans and equity investments carrying great risks.

(2) *Economic Outlook.*—Investors alter their investment decisions from time to time as economic conditions change and as they reapraise the economic outlook. Both the current levels and prospective trends of the national income, the distribution of that income, the aggregate flow of savings, and related factors are extremely important in their effect on investors psychology. Investors may wish to buy more Government securities relatively as they expect deflationary tendencies and they may be willing to acquire other assets of a more risky type as they expect inflationary tendencies. Some individuals may buy fewer savings bonds if they expect inflationary price movements and shortages of goods, or they may buy more savings bonds if they expect prices to be lower and goods to be more plentiful at a later date.

(3) *Availability of Other Investments.*—The volume of capital spending varies tremendously from one period to another; with the result that institutional investors may be offered a large supply of corporate securities and mortgages during certain periods while at other times there may be a dearth of such investment opportunities. The demand for Government securities will fluctuate as such changes take place. For example, life insurance companies increased their holdings of Government securities from about $6 billion (or 19 percent of their total assets) in 1940, to $21 billion (or 46 percent of assets) at the close of World War II. This was a period, of course, in which private investments were in short supply. During the postwar period these institutions reduced their holdings of Government securities in order to take advantage of private investment outlets which were again becoming plentiful. At the present time life insurance holdings of Government securities amount to $11 billion (or 16 percent of total assets).

(4) *"Self-Financing" of Spending Programs.*—During World War II, American businesses accumulated a substantial amount of Government securities, a large part of which were considered to be temporary investments intended to finance postwar plant and equipment programs. Similarly, many individuals accumulated Government securities because they could not build houses or buy certain durable goods during the war. When the war ended, some of these securities were liquidated to finance the new spending. To some extent, this type of accumulation and sale is going on all the time among the various investor groups.

(5) *Central Banking and Fiscal Policy.*—The demand for securities may be materially affected by actions taken by the Federal Reserve to ease or tighten monetary conditions through open market action, changes in reserve requirements, etc. Similarly, fiscal policy may be very important, as, for example, a change in taxation, a change in Government expenditure policy, or a change in the programs of Government credit agencies.

(6) *Size of Liquid Assets.*—In the last 10 years, liquid assets (currency, checking and savings accounts, and Government securities) in the hands of individuals and businesses, for example, have increased from about $75 billion to about $250 billion. This change was caused primarily by the large increase in the public debt. The widening spread of purchasing power resulted in a vast increase in liquid assets in the holdings of all investor groups. One of the results was that individuals as a group increased their financial wealth materially;

many persons found it possible for the first time to own substantial amounts of Government securities as well as to increase the size of their bank balances. In the period mentioned, Government securities increased from one-sixth of individuals' liquid assets to one-third.

(7) *Availability of Appropriate Securities.*—The Treasury has tried to adapt the terms of its securities to fit the particular needs of the various investor groups. Savings bonds represent an outstanding example, and it is noteworthy that the payroll plan for Series E bonds has shown important gains in the last 3 years, at a time when total cash sales of savings bonds were losing some momentum. The payroll plan offers convenience to the great mass of individuals who like the guaranteed feature of the E bonds. Treasury surveys show that most of these investors find these features much more important than the particular rate of interest actually paid. (This subject is discussed further in the answer to Question 34.) The Treasury has also provided specially designed securities for corporations to use for the short-term investment of their tax funds, for insurance companies to use as long-term investments, and for many other purposes.

(8) *Condition of Stock Market.*—Prices of common stocks are alternately strong and weak over short or long periods, depending upon a great many factors. Broad upward movements in stocks probably result in some liquidations of Government securities in order to transfer the funds to the stock market. The reverse situation may occur when there are broad downward movements of stock prices.

(9) *Patriotic Motives.*—During periods of national emergency investor preference for Government securities receives an important added stimulus because people are anxious to do their part in helping to finance extraordinary Government requirements. Surveys during World War II, for example, indicated that the patriotic motive was considered very important by many purchasers of savings bonds.

27. What advantages do you see in a stable long-term Government bond market? What weight should be given to the desirability of stability in the Government bond market in determining credit policy (a) when the Treasury is not expected to be a large borrower in the foreseeable future; (b) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future; (c) when it is expected that the Treasury will be a large net borrower during the foreseeable future; (d) under conditions of total war?

I should like to begin my answer to this question by defining the term, "stable long-term Government bond market" as we think of it in the Treasury. I consider the term "stable market" in this context to mean a market in which prices and yields fluctuate within a moderate range over a considerable period, but without exhibiting any pronounced upward or downward trend. I do not consider it to mean a "pegged market" in which fluctuations are prevented by means of fairly rigid support operations on the part of the Federal Reserve.

The 5-year period from the Japanese surrender to the beginning of the Korean conflict illustrates fairly well the Treasury's idea of a stable long-term market. There was a moderate range of fluctuatic in long-term 2½ percent marketable Treasury bonds during this pe-riod. Prices of the Victory Loan 2½'s of December 1967–72—the bellwether of the long-term market—fluctuated within a 6-point range (a range of approximately three-eighths percent in interest yield). The Treasury and the Federal Reserve worked toward a stable long-term market by increasing the supply of bonds when there was a tendency for prices to rise too sharply, and by taking bonds off the market when the situation was in reverse.

During the last half of 1946 and most of 1947, there was insistent buying pressure in the market, and the Treasury undertook to supply over $2½ billion of additional bonds to the market to prevent long-term interest rates from being driven lower.

Then the situation turned around for about 12 months. Beginning with November 1947, the Federal Reserve bought about $10 billion of bonds as certain investor groups were heavy sellers, partly because they feared losses from a declining market and partly because they needed funds to make loans for capital spending. I view this as a period in which the temporary difficulties of a pegged market were considered subordinate to the longer-run objective of stability in the long-term market.

In 1949, the demand for long bonds again increased as a period of business unsettlement occurred. In the first half of 1950, however, long bonds weakened as industrial production recovered, and they were further depressed by some Federal Reserve selling.

Accordingly, in the 5-year period up to the Korean conflict, long bonds had been in demand for about 4 years. Support operations had been necessary in only 1 year. We worked toward a stable long-term market in these 5 years by enlarging supply at times and demand at other times. Rigid bond prices developed only during the temporary 1947–48 support operation.

Obviously, rigid bond prices are not desirable over any extended period and they are not what I have in mind when I think of a stable bond market. It is the whole 5-year period from the end of World War II to the Korean attack which the Treasury considers to represent an example of a stable long-term market.

With this definition of a stable long-term market in mind, I think that there will always be advantages and disadvantages in Treasury and Federal Reserve action to promote such stability. The balance may lie in one direction under certain circumstances, and may turn around under other circumstances. Taking a long-run view of these matters, it may be helpful to present a somewhat generalized list of the principal advantages and disadvantages of a stable long-term Government bond market.

Advantages

1. By far the most important advantage of a stable long-term Government bond market over a period of time is the strong base which such a market provides for the maintenance of confidence—confidence in the Government's credit, confidence that the financial terms of doing business will not change greatly in the near future, and confidence in the continued smooth functioning of our financial system generally. Because of the importance of the public debt, the operations of portfolio managers in financial and investment institutions, the plans of businessmen for capital expenditure programs, and the actions of investors generally are all geared in greater or less

degree to expectations respecting developments in the Government securities market.

The confidence engendered by a stable market means that financial institutions are strengthened and the use of their services promoted. The major savings institutions are enabled to step up their financing for industry because of the greater liquidity of their security holdings. At the same time, businessmen are more ready to make plans for the future and more willing to begin long-term projects. Greater strength is given to the financial markets generally and the marketing of all types of securities is facilitated. All of these factors mean that industrial growth and a high level of business activity are stimulated.

2. A second important advantage of a stable Government bond market is the fact that such a market facilitates Treasury financing operations. With a public debt of over $250 billion and refunding operations of approximately $50 billion each year, this consideration is of great importance. It is, of course, of particular importance at times when new borrowing as well as refunding must be undertaken.

Disadvantages

1. Efforts to maintain a stable long-term market may interfere with Federal Reserve efforts to regulate money and credit. This might be a serious disadvantage under certain circumstances.

2. Long-term securities might be made so liquid that inflationary tendencies could be engendered.

3. Once a substantial number of Government issues bearing rates within a given range have been put out, it may be awkward to shift to a different range of rates which might be desirable under different circumstances.

4. Market relationships between short-term and long-term maturities might become distorted as short-term investors begin to rely too fully upon the maintenance of market stability and place their money in long-term bonds. As a result, short-term rates would probably be driven up and long-term rates would probably be driven down.

* * * * * * *

Now I would like to turn to the second part of the question, which lists four alternative conditions as to Treasury financing needs. Before doing that, however, it should be emphasized that under each of the alternatives mentioned the general economic conditions prevailing at the time would exert a major influence on the decisions that would have to be made. This refers not only to considerations relating to a stable market, but to other important debt management considerations as well.

The four alternative conditions are considered here in reverse order.

"*Under conditions of total war*," a stable long-term Government bond market is essential. This is amply demonstrated by the Treasury's experience in the first and second World Wars. Rising rates tend to cause investors to hold back in buying bonds in anticipation of even higher rates and thus may result in more borrowing from banks rather than less. It should be noted that the widespread use of physical controls (allocations, price controls, etc.) in wartime adds greatly to our arsenal of anti-inflationary weapons and tends to reduce the need for reliance upon general credit controls. Selective credit controls likewise may be employed to supplement direct controls. The policy of stabilizing long-term rates in wartime, moreover, could skirt some of the disadvantages enumerated above, if efforts were made to keep investors aware of the fact that rates were not being stabilized forever, and that future uncertainties were therefore to be expected.

Next let us consider the hypothesis "*when it is expected that the Treasury will be a large net borrower during the foreseeable future.*" If the Treasury's needs arise from a deficit that is caused by defense spending, the situation would have some of the attributes of an all-out war economy. General credit restraint should be used in these circumstances as a supporting measure for budget policy and direct physical controls to the extent it can be pushed without danger of unwanted repercussions. Additional taxes and the widespread use of direct controls, supplemented by appropriate selective credit controls, would tend to reduce the extent to which general credit controls had to be relied on.

If the Treasury's needs were arising from a deficit due to depression, long bonds would probably be in demand, and long interest rates would be turning lower. If the depression seemed likely to become extended, general economic considerations would probably favor a policy of letting this trend in interest rates continue, rather than seeking to stabilize rates by open market sales to help hold down bond prices and thereby, perhaps, reduce bank reserves and the money supply. The decision as to the economic outlook, of course, is one which can only be made with reference to the specific circumstances existing at the time. Admittedly, the forecast is a difficult one and must be continually re-evaluated in the light of changing circumstances.

The next hypothesis is "*when a large volume of Treasury refunding operations will have to be effected in the foreseeable future.*" If the country were thought to be in a neutral economic position or a temporary boom there would be an important argument for stability in the long-term market, now that the debt is so large. A declining market would be a market with bondholders who had seen the value of their securities drop after the last refunding. This might make the next refunding harder. People might be suspicious that the weakness would go further. On the other hand, the Treasury has some power to counter such weakness by its choice of securities for refunding. The terms of a new issue could be altered to strengthen successive refundings. With a flexible approach, the Treasury might be able to cope reasonably well with an unstable market. Given the high volume of the Federal debt, however, I do not believe it would be wise to take unnecessary chances. Yet if economic conditions developed into a runaway capital expenditures boom, efforts to maintain a stable long-term market would have inflationary implications. Action to tighten credit and raise interest rates might be in order. I would like to discuss this contingency more fully in the next hypothesis.

The final hypothesis is "*when the Treasury is not expected to be a large borrower in the foreseeable future.*" Here the answer would hinge largely upon two factors: (1) the economic situation, and (2) the size, ownership and maturity distribution of the Federal debt. In a business depression there would probably be no problem. Long-term bonds would probably be in demand, as private investment outlets shrank. Also in a period of approximate economic balance, there would likewise probably be no serious problem.

But in a boom situation, the question would have to be faced as to whether inflationary pressures would probably be prevalent over the long run or for just a short period. There was great uncertainty in the postwar period regarding the duration of inflationary pressures. Recurrent prophecies of the inevitability of a depression and of widespread unemployment will be recalled. It was necessary to take every precaution to avoid setting in motion recessionary forces. Under such circumstances, particularly when there is a large Federal debt, the maintenance of some degree of stability in the long-term market is desirable. This, however, would not mean rigid pegging except, possibly, for temporary periods.

On the other hand, if an extended boom should develop it would probably be necessary to use general credit restraint. Care would have to be taken to avoid a market unsettlement of the kind which might have severe economic repercussions. It would be essential to consider whether selective credit controls or new approaches or techniques would help to accomplish the desired objectives. The Government would surely need a strong budget policy under the conditions assumed; and taxes should run well ahead of expenditures to provide for debt repayment. The Treasury might also find it desirable to develop new kinds of securities for debt management, and perhaps new instruments of credit control could be devised. Various possibilities are discussed in the answers to Questions 35–41.

* * * * * * *

I do not consider that the discussion of the four alternatives above covers all possibilities. The role of interest rates is discussed more fully in the answer to other questions. It is obvious that in a dynamic economy central banking tools must be used appropriately in order to ease the problems of business fluctuations and to work toward sustained economic growth. The arguments for and against a stable market at any given time can be made only with reference to the particular set of economic circumstances existing at the time the decisions are being made.

28. Has the Treasury Department ever taken action on its own initiative or in cooperation with the Federal Reserve System to change the level of interest rates on Government securities, or to prevent a change in interest rates which would have otherwise occurred? Give examples—if possible, of actions operating in each direction.

The Treasury has taken action in cooperation with the Federal Reserve to change the level of interest rates on Government securities in recent years as well as to prevent changes which might otherwise have occurred. These actions have been described in detail in the answer to Question 17. Two examples are repeated here.

1. In 1947 and 1948, steps were taken to raise short-term interest rates. The 3/8 percent wartime rate on 91-day Treasury bills was abandoned and the rate rose to 1 percent by early 1948. The 7/8 percent wartime rate on 1-year certificates was raised slowly to 1¼ percent by the fall of 1948.

2. In the long-term area steps were taken in late 1946 and 1947 to keep rates from declining further. The long market had been very strong most of the time since the Victory Loan, and the yield on the

$2\frac{1}{2}$ percent Victory Loan bonds of 1967–72 was down to $2\frac{1}{4}$ percent. We probably could have taken the opportunity to get the Government on a long-term rate of $2\frac{1}{4}$ percent, but it seemed very important to me that broad stability in the market be maintained.

These two examples refer to instances when the Treasury and Federal Reserve cooperated to raise interest rates or to keep them from falling. Actions taken since I have been Secretary of the Treasury have been preponderantly in this direction, because of the economic situation since the end of the war. However, in 1949 there was a slight business setback and the certificate rate was dropped back again from $1\frac{1}{4}$ percent to $1\frac{1}{8}$ percent. When business recovered, this action was reversed and the 1-year rate was raised slightly in early 1950.

29. Please explain your position regarding the importance of interest on the public debt as a budgetary cost.

This question has been partly discussed in the answer to Question 2, in which I stated that the Treasury is guided by nine broad objectives of economic policy, as follows:

1. To maintain confidence in the credit of the United States Government.
2. To promote revenue and expenditure programs which operate within the framework of a Federal budget policy appropriate to economic conditions.
3. To give continuing attention to greater efficiency and lower costs of governmental operations.
4. To direct our debt management programs toward (a) countering any pronounced inflationary or deflationary pressures, (b) providing securities to meet the current needs of various investor groups, and (c) maintaining a sound market for United States Government securities.
5. To use debt policy cooperatively with monetary-credit policy to contribute toward healthy economic growth and reasonable stability in the value of the dollar.
6. To conduct the day-to-day financial operations of the Treasury so as to avoid disruptive effects in the money markets and to complement other economic programs.
7. To hold down the interest cost of the public debt to the extent that this is consistent with the foregoing objectives.
8. To assist in shaping and coordinating the foreign financial policy of the United States.
9. To manage the gold and silver reserves of the country in a manner consistent with our other domestic and foreign policy objectives.

I would like to repeat here the comments which were made in connection with the seventh point.

> . . . it would be a serious error to conclude that the Treasury Department believes that holding down the interest cost of the public debt should be the sole or major goal of debt management. I have never believed that it should be. It is only one of the several objectives of Treasury policy, and it is one that is subsidiary to the primary goals of promoting sound economic growth and stability in our financial system.
>
> On the other hand, I do not concur in the view that the level of interest payments on the public debt is of only minor significance for the economy as a whole. Some of those who hold this view argue, first, that the bulk of our interest

payments represents only transfers of income from taxpayers to bondholders within the United States, rather than a consumption of real labor and materials; and, second, that those who receive the interest payments pay back a substantial portion of the amount in taxes.

While acknowledging the element of truth that these views contain, I cannot conclude that the interest burden on the public debt is of negligible importance. In the first place, those who pay the taxes and those who hold the securities are not necessarily identical. In the second place, the transfer of income through collection of taxes and payment by the Government is never painless and costless, however wise the Government may be in devising and administering tax policy. With taxes at their present high levels, it is increasingly difficult to find additional revenue sources that are reasonably equitable and that do not unduly impair the incentives necessary to the effective functioning of our free enterprise economic system. For these reasons, the Treasury always endeavors to hold interest costs on the public debt to the lowest level consistent with its other objectives.

This explains the general position of the Treasury with reference to the importance of interest rates as a budgetary cost. I would like also to refer to the answer to Question 28, which provides examples of occasions on which policies were deliberately adopted which permitted interest rates to rise, or steps were taken to keep them from declining. The reasons for these actions had to do with broad economic and financial considerations; and these, naturally, outweighed the fact that budgetary costs for interest were either being increased or were kept from declining by the actions taken.

It may also be noted that the yields of savings bonds to maturity have always been more generous than the corresponding interest rates on marketable securities. It has always been felt that the benefits of savings bonds as part of the over-all objective of good debt management far outweighed the extra interest cost to the Treasury and also the higher handling costs involved.

30. Has the growth of the public debt changed the nature of the methods which can be prudently used by the Federal Reserve System with respect to monetary and credit policy?

The emergence of a large public debt, mainly as a result of World War II, has clearly raised many new problems for the Federal Reserve System in regulating the cost and supply of bank credit. The public debt now constitutes almost half of the total debt in the United States. It constitutes an important part of the assets of all of our major financial institutional groups and of many business concerns and individual investors throughout the Nation. Under these circumstances, traditional measures for the general regulation of credit through changes in its cost or availability have to be weighed in the light of their impact on the price and interest-rate structure of United States Government securities, on the successful refunding of maturing issues, and on the investment positions of financial institutions and of many other individual and corporate holders of Government obligations.

This answer takes up these matters in some detail. In the discussion, it is convenient to divide the subject matter between commercial banks and nonbank investors.

1. Commercial Banks

The growth of the public debt has brought about a basic change in the asset composition of commercial banks, with important implications for measures employed in the regulation of monetary and credit conditions. The following table shows the assets of commercial banks as of June 30, 1914, 1929, and 1951:

	Amounts (in billions of dollars) June 30—			Percentage distribution June 30—		
	1914	1929	1951	1914	1929	1951
Reserves held in Federal Reserve Banks and cash	5	9	37	22	15	22
U. S. Government securities	1	5	59	4	8	36
Loans, other securities, etc.	17	48	70	74	77	42
Total assets	23	62	166	100	100	100

The table shows that, in 1914, nearly three-quarters of the assets of all commercial banks in the United States consisted of "loans, other securities, etc.", and a large proportion of this was in short-term loans to business enterprises. Only 4 percent consisted of United States Government securities, which were held almost entirely as collateral for national bank notes.

In June 1951, in contrast, the "loans, other securities, etc.," of all commercial banks in the United States constituted only 42 percent of their total assets, while Federal Government obligations constituted 36 percent. Moreover, business loans alone amounted to less than one-sixth of their total assets as compared with about one-third in 1914.

One result of the increased importance of Government securities relative to loans has been to weaken the potential effectiveness of the discount rate as a tool of Federal Reserve credit policy. Discount rates are the rates at which member banks can obtain additional reserves from the Reserve Banks by rediscounting the paper of their customers or by borrowing on their own notes secured by eligible collateral. When the Federal Reserve System was first established, it was expected to influence credit conditions mainly by alterations in these rates. The reasoning was that when the Reserve authorities thought it appropriate to encourage credit expansion, they could do so by lowering discount rates. When they wanted to discourage credit expansion, they could bring this about by raising discount rates.

From 1918 to 1929, inclusive, member banks in the aggregate obtained a considerable proportion of their required reserves through rediscounts and advances from the Federal Reserve Banks. Because of the traditional reluctance of banks to remain in debt this fact made the volume of their loans quite sensitive to the availability and cost of Reserve Bank credit. Under these conditions, a general restrictive credit policy by the Reserve authorities operated directly on loans to business.

With the growth in bank holdings of Government securities, this situation underwent a substantial change. In recent years, the rediscounts and direct advances of the Reserve Banks to member banks have been small nearly all of the time. Member banks have not been rediscounting paper extensively at the Reserve Banks when their reserve balances ran low. Instead they have tended to sell some short-term Treasury obligations in the market; or they have turned in some of their maturing Treasury securities for cash in place of accepting a refunding offer.

In recent years open market operations and increases in reserve requirements have become the principal means used by the Federal Reserve for effectuating general credit restraint. The growth of the debt has widened the scope of open market operations; at the same time, however, it has made it possible for the banks themselves to offer considerable resistance to efforts by the Federal Reserve authorities to get them to curtail the expansion of business loans. As already noted in the answer to Question 22, large holdings of short-term Government securities make it possible for the banks to sell such securities in the market to raise funds; or, if this becomes difficult or too costly because of Federal Reserve operations, the banks may turn in maturing Treasury securities for cash instead of accepting refunding offers. (As was noted in the answer to Question 22, it is true, of course, that if the banks let their securities run off at maturity, the Treasury must find funds with which to pay the bank holders of maturing issues; the controlling factors here, therefore, are related to the sources of funds which the Treasury is able to tap at the time.)

In consequence of these fundamental changes in the banking situation, a general restrictive credit policy today is not necessarily a direct attack on loan expansion. Instead of curtailing their loans, banks today are more likely to attempt to liquidate Government securities. A moderate measure of *general* credit restriction may, therefore, be relatively ineffective against continued expansion of bank loans; while a drastic restrictive policy may easily produce dangerous consequences for the Government securities market and for the economy as a whole. This is a major reason why a restrictive credit policy must be undertaken more cautiously now than formerly.

It has been urged by some that the appearance of book capital losses on securities accompanying even a small rise in interest yields would deter banks from selling securities. This factor doubtless has some influence, particularly in the case of longer-term securities; but it is easily exaggerated. (See also discussion in the answer to Question 22.) Even very substantial increases in interest rates do not cause short-term securities to depreciate far in price. For example, a 2-percent security maturing in 1 year would still sell at about 99 in the market if the 1-year interest rate rose from 2 percent to 3 percent—or about 98 if the interest rate rose from 2 percent to 4 percent. The very fact of their early maturity prevents much depreciation. It is also well to remember in this connection that the banks own $20 billion of short-term Treasury obligations, some maturing every week, which can be turned into cash without any loss whatsoever.

The behavior of the commercial banks in 1937—at a time when bank holdings of Government securities were a smaller proportion of their total assets than at present—offers an example of the way general credit measures (in this case an increase in reserve requirements) tend to hit primarily at Government securities and only secondarily at loans of commercial banks. In August 1936 and the spring of 1937, the Board of Governors of the Federal Reserve System raised reserve requirements in a series of steps which taken together doubled the requirements of member banks. The 1936 increase in reserve requirements took place when the banks were well cushioned with excess reserves—which amounted to approximately $3 billion in the summer of 1936—but the additional increases in the first half of 1937 pinched many banks, particularly in the larger cities. The intention of these actions was to mop up excess reserves which were superfluous, in the view of the Board, for all immediate and prospective needs, and not to exercise a restrictive effect on member bank loans and investments. The Board stated that it felt that practically all banks had far more than sufficient reserves and balances with other banks to meet the increases.

But the member banks met the reduction in their free reserves in the spring of 1937 by liquidating Government and other investment securities. During the first 6 months of the year, they reduced their holdings of Government securities (direct and guaranteed) by $856 million, and their holdings of other securities by $329 million. They *increased* their loans by $925 million. The liquidation of Government securities was sufficient to result in a drop in bond prices (which means a rise in bond yields) and caused the average market yields of all long-term Treasury bonds to rise from 2.46 percent at the beginning of the year to 2.84 percent early in April. This seems to have been a surprise to the Board, which had stated in January that there should be no effect on long-term interest rates resulting from the final steps in the doubling of reserve requirements.

This incident stands as a significant bit of history in that it showed that on this occasion at least (*a*) bankers wanted more room to turn around in—by keeping excess reserves—than the Board had thought and (*b*) when banks felt it necessary to retrench to meet the new requirements, the major impact was on Government securities rather than on loans. This could hardly be considered extraordinary in view of the fact that bankers commonly regard their relations with regular customers as extremely valuable. This gives them a strong and persistent motive to accommodate their customers. It is a motive that is re-inforced by competitive considerations. A bank that does not take care of the legitimate needs of its customers when money becomes somewhat tight takes the strong risk of losing them permanently, and of having too few good customers when money is not so tight. Hence, commercial banks have a continuing incentive to take care of their regular customers even when doing so requires the sale of Treasury securities in a weak market. A program of credit restraint of the sort just described may thus have little effect on lending policy, even though it may have fairly sharp effects on the yields of Government securities. However, it cannot be denied that marginal customers and marginal borrowing of regular customers may, of course, be affected but this marginal area of loan operation may well be relatively small.

Clearly the process of credit restriction has a different institutional pattern today than in the early years of the Federal Reserve System. When the discount rate was raised in the Twenties, and banks reacted by reducing the volume of loans, they dealt directly with the various borrowers. A failure to renew a loan at maturity had an immediate effect on bank credit and on the business actions dependent on it. Today, if the Federal Reserve engages in open market sales, its actions do not have this direct effect. Debt will not be reduced directly by getting a debtor to repay. Instead, indirect actions are involved. The process of credit restraint is much more involved than it was a generation ago.

If the Federal Reserve authorities pursued a policy of exerting stringent enough credit restraint, they could probably bring on a contraction in lending. But a restrictive policy carried to such an extreme point, even if the intention were to confine it to the short-term area, would be likely to have harmful effects that would outlast the short-term circumstances that led to the policy. The rise in interest rates would not be confined to short-term rates, but would spread to the rates on long-term borrowing by public utilities, railroads, and mortgage financing, as well as Government borrowing itself. Difficulties would be created for the Treasury's large refunding operations. The depreciation in the prices of long-term bonds might prove unsettling and embarrassing to some financial institutions. These results would tend to linger on long after the halting of the expansion in business loans had been achieved. The restoration of the confidence of lenders and borrowers is not likely to be achieved as quickly as it is disturbed.

Where does this leave us today? My conclusion is that the Federal Reserve has to use great discretion in its general credit control operations to obtain the proper results. This is not a black and white proposition in which a person is for or against general credit control; rather it is simply a realistic appraisal of changes in the environment in which central banking must operate.

The new problems have led to numerous proposals to use the reserve mechanism in some new way so that Federal Reserve control over bank loans would be more direct and, therefore, more effective. The advantages and disadvantages of some of these are discussed in the answers to Questions 35–36 and 39.

2. Nonbank Investors

One of the significant effects of the increase in the Federal debt is that it has provided a more direct medium between the Federal Reserve and the various major nonbank financial institutions. The balance sheets of these institutions have undergone a change much like the change referred to above for commercial banks. These institutions now have a larger volume of liquid assets in the form of readily marketable Federal securities than formerly. The figures for major groups are as follows:

	December 1929	December 1951
Life-insurance companies:		
U. S. Government securities	\$0.3 billion	\$11.0 billion.
Percent of total assets	2 percent	16 percent.
Mutual savings banks:		
U. S. Government securities	\$0.5 billion [1]	\$9.8 billion.
Percent of total assets	5 percent	42 percent.
Savings and loan associations:		
U. S. Government securities	\$0.1 billion [1]	\$1.6 billion.[1]
Percent of total assets	1 percent	8 percent.

[1] Estimated.

The figures show how Government securities have jumped from 2 percent to 16 percent of the total assets of life insurance companies, from 5 percent to 42 percent of the assets of savings banks, and from 1 percent to 8 percent of the assets of savings and loan associations.

The new situation offers both an advantage and a hazard to the Federal Reserve. It is an advantage in the sense that assets in Government securities constitute important reserves for these investors, and the degree of liquidity of these reserves may be influenced by market fluctuations brought on by Federal Reserve operations. This brings the Federal Reserve much closer to these nonbank financial groups than was true before the growth of the Federal debt.

On the other hand, the new situation is a hazard to the Federal Reserve in that any action in the long-term market may have an unexpected chain reaction, now that Federal securities are so important to nonbank investors, and a certain amount of market sensitivity is therefore always present.

Peculiarly enough, the fact that this market sensitivity exists points up both the advantages and the hazards of the new situation. Everyone recognizes that there is a large body of assets in the hands of investors who may be very sensitive to any development which looms as a threat to stability in the bond market. For the most part, these holders are not the small investors. On the contrary they are the professional portfolio managers; bank and insurance company executives; administrators of personal trusts, corporate funds, State and local funds, etc.

The portfolio managers in this category are a very sophisticated group, by and large, with a high degree of professional pride. They are constantly fearful that they will be caught unawares in some way. Consequently, they are always anticipating the market and are continually apprehensive that something will happen to change the outlook after important decisions or commitments have been made. This apprehensive feeling is one reason why the Treasury felt that a drop in the price of long-term Government bonds in 1948 might bring on a great wave of selling. The selling would have been engendered by the fear that prices would go even lower, and the portfolio man who sold early would have reasoned that he would be able to either (*a*) minimize his losses, or (*b*) make some profits by reinvesting later at lower prices.

On the other hand, there is the view that it is possible to capitalize on this sensitivity of a large body of holders of the vastly expanded public debt. It is said that this sensitivity can be used to advantage, and that small movements of interest rates and bond prices may produce highly desirable changes in the monetary situation. According to this view, therefore, the growth of the debt and the uneasiness of some of the holders mean that the Federal Reserve has more control than ever because of the repercussions that follow from its actions.

Despite the difference in emphasis between these two views, there is evident agreement on one fact: The existence of a substantial body of sensitive holders. The different conclusions arise from a consideration of how the holders of Government securities would react to measures taken to restrict credit. The view of one group is that small actions can produce useful results; that it is safe to experiment and that if a mistake is made it can easily be corrected. The argument on the other side is that small actions may produce chain reactions leading to completely unpredictable results; and that it may be difficult to correct mistakes. Both views take account of the fact, however, that Federal Reserve operations now extend to the long-term market and to nonbank investors more than was true some years ago. This has its advantages and its difficulties; experience will help make it possible to handle the problems in this area with greater precision.

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There are two general points to be added to what has been said above with regard to bank and nonbank investors. These are (1) no precise forecast of the probable results of general credit restraint can be made—a serious difficulty with such a large Federal debt—and (2) it is difficult to reverse things if a given step brings on undesirable repercussions.

The impossibility under present conditions of measuring in advance the effects of a general restrictive credit policy means that sudden and severe declines in the market prices of Government securities may be produced by what was intended to be a moderate degree of credit restriction. This provides a strong reason for caution.

Sudden and severe declines in the market prices of Government securities might be shocking to public confidence. They might be embarrassing to many financial institutions owning large portfolios of Government and other high-grade securities, particularly those with small amounts of stockholders' capital relative to their total assets.

Such declines would complicate the Treasury's financing problems. In addition to any new money which must be borrowed when the budget is not balanced, the Treasury must refund approximately $50 billion of maturing securities every year. Refunding operations and offerings for new money would be made difficult by wide declines in the bond market.

Some persons think they have an easy answer for this problem. They argue that if market prices are falling, all the Treasury needs to do to refund its maturing obligations successfully is to offer a higher rate of interest in line with the new market situation. Such people have not observed the strong tendency of many investors, institutional as well as individual, to withdraw from a market when it is declining, and to reenter it only after it has stabilized.

Even when the market seems to have leveled out, many investors may still be afraid that stability has not been restored. It is true that the Treasury might be able to raise the money it needs in such a situation by selling securities to the banks, but that might have to be done when bank borrowing would otherwise be undesirable.

In concluding my answer to this question, I wish to make it clear that I thoroughly believe in the advisability of credit restraint at appropriate times in appropriate forms; and that I have no desire to bring about or to maintain an artificial level of interest rates for Treasury or other securities. I do feel, however, that there are occasions when the ordinary methods of credit restriction may have wider and more lasting effects than formerly, and that far greater caution is therefore necessary in using them.

31. Have there been important economic changes since 1913 which affect the efficiency and appropriateness of traditional Federal Reserve System operations?

The changes that have taken place in the economy since 1913 have had a considerable effect on the efficiency and appropriateness of traditional Federal Reserve operations which work toward a general regulation of credit through changes in its cost or availability. In a great many respects, the effect has been to limit Federal Reserve operations; although in some other respects, new opportunities have been created for monetary policy.

In my opinion, there have been five major economic changes since 1913 which affect the efficiency and appropriateness of traditional Federal Reserve operations. These may be summarized as follows:

1. The huge increase in our public debt, which has magnified the problems of debt management.
2. The increase in secondary reserves of the commercial banks (i. e., short-term United States Government securities), which helps to make banks relatively free to resist general credit restraint by the Federal Reserve.
3. The rapid growth of lending institutions other than commercial banks, together with an important increase in their reserves in marketable Federal securities.
4. The improved financial position of American business and consumers, which makes increased "self-financing" possible.
5. The much larger role in economic affairs taken by the Government.

These five major economic changes are discussed in more detail in the following paragraphs.

1. The Huge Increase in Our Public Debt, Which Has Magnified the Problems of Debt Management

This has been discussed in part in the preceding answer and is referred to in various other answers to this questionnaire. The essential point is that the Federal debt is now close to one-half of all debt in the United States. Such a large debt must be properly managed, and this may at times limit Federal Reserve operations relating to credit control.

2. The Increase in Secondary Reserves of the Commercial Banks (i. e., Short-term United States Government Securities), Which Helps to Make Them Relatively Free to Resist General Credit Restraint by the Federal Reserve

This is discussed in the answer to the preceding question. Some plans have been proposed to help remedy the situation, and are commented on in the answers to Questions 35–36 and 39.

3. The Rapid Growth of Lending Institutions Other than Commercial Banks, Together with an Important Increase in Their Reserves in Marketable Federal Securities

The rapid growth in the assets—particularly Government securities—and annual gross receipts of lending institutions other than commercial banks has raised new questions as to the efficiency and appropriateness of traditional credit controls since these nonbank institutions are not affected directly by such controls.

A substantial amount of personal saving is now placed in the various savings institutions, which in turn invest the funds. Life insurance companies are growing at the rate of over $4 billion a year and now administer over $65 billion of assets—almost 15 times as much as in 1913. The large insurance companies now compete actively with commercial banks for many business loans, particularly the larger and longer-term loans, and they provide many of the long-term loans for industrial plant expansion and residential and other construction. Large sums available for new investment each month also flow into the mutual savings banks, savings and loan associations, and other financial institutions.

Loans by nonbank institutions do not increase total bank deposits, whereas those of commercial banks do. Even so, they facilitate an increase in spending. They place the idle cash and current savings of millions of small savers in the hands of business enterprises and individuals who make active use of them. A traditional restrictive credit policy operates by reducing the lending power of commercial banks. It exerts indirect effects upon the lending power of nonbank lending institutions, by influencing the market prices of the securities they hold. In this way the liquidity of these securities can be reduced, but it is not known with any certainty how much actual effect this has on lending activity. (See the answer to Question 22.)

The great growth in the importance of nonbank credit institutions has been recognized increasingly. This is one reason why the Board of Governors of the Federal Reserve System has obtained selective credit controls over some areas of nonbank as well as bank lending. It obtained control over stock margin requirements under the Securities and Exchange Commission legislation of 1934 (Regulations T and U). It obtained temporary control of consumer credit (Regulation W) during World War II, and this control has since been renewed by the Congress and is again in effect. Since the beginning of the Korean incident, it sought and obtained considerable power over construction loans (Regulation X). It has developed the Voluntary Credit Restraint Program to channel credit into essential uses. All of these actions represent steps toward increasing reliance on selective credit controls in recognition of the growing importance of nonbank lending and limitations placed on general credit controls by the existence of a huge public debt.

4. The Improved Financial Position of American Business and Consumers, Which Makes Increased Self-financing Possible

The tremendous growth of liquid assets of both individuals and corporations during the last generation has provided a large part of the American economy with a ready source of funds which can be tapped without resort to extensive borrowing operations. The existence of this large body of liquid assets—in the form of currency, checking and savings accounts, and Government securities—has, for example, tended to reduce the degree of reliance by individuals and corporations on bank loans. In 1914 the level of total commercial bank loans (and investments other than Government securities) outstanding was equal to approximately 40 percent of the Nation's gross product. Since that time, gross national product has grown much more rapidly than bank loans, so that today these loans are at a level equal to only 20 percent of the national product.

As a result, it is easier today for consumers to indulge in large amounts of spending without having to go into debt. The current high level of personal income in itself makes self-financing easier. If such spending cannot be financed easily out of income, it can in many cases be financed by the use of liquid assets—by increasing the rate of turnover of checking and savings accounts, currency, and E bonds.

This is an important factor in the financing of business, too. A generation ago, businessmen characteristically had to seek outside capital for plant expansion and bank funds for current operations. This is no longer necessary, however, for a rather large portion of the business community. The steady growth of American business has increased the opportunities for self-financing significantly. This is not universally true, of course. There are still many businesses that depend on outside funds. Over short periods this proportion may increase; recently, for example, there appears to have been some decline in business liquid position as the result of special factors associated with the defense program. Nevertheless, I believe that the long-term trend of the country has been toward more self-financing.

Statistics for nonfinancial corporations in recent years show a remarkable degree of self-financing. In the last 6 years—including the period of tremendous expansion of industry since the beginning of the Korean conflict—total requirements of American corporations for plant and equipment and working capital aggregated about $175 billion. One hundred billion dollars of that total was financed solely through the use of undistributed corporate profits and depreciation allowances. The remainder was financed by outside sources, of which over $20 billion was provided by insurance companies and mutual savings banks. (It should be noted that some of this financing was aided by Federal Reserve purchases of long-term Treasury bonds; despite these purchases, however, Federal Reserve holdings of Federal securities were lower at the end of the period than at the beginning.) Less than $15 billion of total corporate financing in this 6-year period (8 percent) was accounted for by bank financing—through increases in business loans, mortgage loans, and corporate securities held by the commercial banks.

5. The Much Larger Role in Economic Affairs Taken by Government

Before the Federal Reserve System was established in 1913, tariffs, anti-trust legislation, and railroad and other public utility regulation were virtually the only major instruments of economic policy of the United States Government—aside from the normal Treasury operations which have been carried on for a long time with an eye to economic considerations. Even when the Federal Reserve System was established, it was regarded as having rather narrow objectives. It was hoped that it would cure such difficulties as the seasonal inelasticity of bank reserves and currency, and occasional money panics. During the 1920's, the Federal Reserve System gradually adopted the broader goal of contributing to stability in business activity by alterations in bank credit and interest rates.

Today, the Federal Government's activities in this direction are much broader than the regulation of bank credit; and various economic programs of the Government are implemented by financial operations of a size which inevitably influences the level and stability of economic activity. The Employment Act of 1946 has declared it to be "the continuing policy and responsibility of the Federal Government . . . to promote maximum employment, production, and purchasing power." A great many programs operate to influence economic activity in particular areas.

The Federal Government and some of its corporations and credit agencies now make loans or insure or guarantee private loans. The Government agencies engaged in these operations are promoting specific programs adopted by Congress, such as those of the Commodity Credit Corporation, the Rural Electrification Administration, the Federal Housing Administration, the Public Housing Administration, the Veterans' Administration, etc.

Because of their size and character, deliberate slowing down and speeding up in the operations of these agencies are capable of producing substantial economic effects independently, to a considerable degree, of the policies of the Federal Reserve System. Similarly, sharp changes in Federal expenditures or in tax levies, because of their greatly increased size, are likewise capable of producing important economic effects of a stabilizing or destabilizing character. The management of the public debt, as is brought out elsewhere in this questionnaire, is also capable of exerting important influences.

In consequence, it seems to me, the policies and methods of the Federal Reserve System no longer occupy the same role in Government actions to promote economic stability at a high level that they did a generation ago. Federal Reserve policy and methods have to take into account the other policies of the Government, supporting them or adjusting to them as far as is consistent with the Reserve System's primary responsibilities. At the same time, it is desirable that the Reserve System's credit policies receive appropriate support from the policies of Government credit agencies and of the Government generally.

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It is clear, therefore, that the Federal Reserve System has encountered a great many changes in the economic environment in which it must operate since it was first established in 1913. These changes, it seems to me, have been so significant that the traditional Federal Reserve methods are no longer as appropriate as they were in earlier years.

Yet the Federal Reserve has also made some gains over the period. The Federal Reserve has greater freedom in the domestic area as a result of the change from the gold coin standard to the international gold bullion standard. In addition, new tools—such as the increased use of selective credit controls which apply to nonbank lending as well as bank lending—have been developed which help to meet the changed conditions; and additional changes in central banking will probably evolve in the years ahead. Furthermore, the increase in the public debt has provided the Federal Reserve with a much more extended medium for open market operations, and has thereby enabled it to extend its influence over the long-term security market and over nonbank investors, as is discussed in the answer to Question 30.

32. To what extent does the choice of maturities of new and refunding issues of Treasury securities enable you to influence the money and investment markets?

The Treasury's choice of maturities of new and refunding offerings exercises an important influence on the level of interest rates in different sectors of the money and investment markets, because of the great volume of Federal securities outstanding and the frequency and size of the Treasury's refunding operations. A reduction in the volume of short-term Treasury securities outstanding through refunding into longer-term issues, for example, tends, other things equal, to reduce short-term interest rates or to keep them from rising as much as they otherwise would rise. It also tends to raise longer-term interest rates. On the other hand, if the Treasury increases the volume of securities offered to the short-term market and refrains from offering securities to the longer-term market, it exerts the opposite influence; it tends to raise short-term rates and lower long-term rates.

Further, the receptiveness of the market to different maturities varies at different times. On some occasions, particular maturity dates are unpopular; and if the Treasury forced upon the market at such a time a large amount of bonds maturing on such dates, interest rates for all high-grade obligations having similar maturities would tend to be forced upward. On the other hand, an equal amount of Treasury offerings with maturities particularly favored by the market at the time might be floated without any increase, or without more than a slight increase, in the prevailing yields on high-grade obligations of similar maturity.

The receptiveness of the market to various maturities is one of the many facets of the money and investment markets which the Treasury and the Federal Reserve study continuously. Before decisions on new borrowing or refunding are made, both agencies give careful consideration to the broad economic picture and to the changing income and asset position of the major investor groups. The liquidity position of the various investor groups is followed closely and particular attention is given to their holdings of secondary reserves in the form of short-term Government securities.

Two illustrations of debt management which have been discussed in the answers to other questions may be referred to here. The first is the increase in Treasury bill issues in the summer and fall of 1951. At this time, a short-term Treasury security was needed to tap corporate funds which were being accumulated because of heavy tax accruals. Treasury bills fitted the needs of the corporations involved, and they acquired substantial amounts of them. This increased nonbank ownership of the debt. The money market was also affected inasmuch as corporations paid for a large share of the bills they bought by drawing down deposits in money market centers; and this contributed to a tightness of bank reserves in the financial centers.

The second example relates to the long-term area in which steps were taken in late 1946 and 1947 to keep rates from declining further. The long market had been very strong most of the time since the Victory Loan, and the yield on the 2½ percent Victory Loan bonds of 1967–72 was down to 2¼ percent. We probably could have taken the opportunity to get the Government on a long-term rate of 2¼ percent, but it seemed very important to me that broad stability in the market be maintained. The steps that were taken to help maintain this stability are described in the answer to Question 17. They involved the sale of some of the long-term bonds held by the Government investment accounts and the offering of a long-term nonmarketable investment bond. These Treasury actions were designed to provide a supply of securities in the long-term area sufficient to meet buying pressure. The issuance of short-term securities would not have met the problem.

33. In your opinion is it possible to separate decisions with respect to interest rates from the decisions regarding timing, amounts of offerings to different sectors of the market, designing of securities for various investor classes, and similar considerations?

In my opinion, it would not be feasible for the Treasury to make such separation in connection with new offerings of securities. The timing of offerings, the amounts offered to different sectors of the market, the characteristics of the securities designed for different investor classes, and the rate of interest are all important elements in arriving at a financing decision, and they are interrelated to a high degree. Market conditions must, of course, be a prime consideration in determining a financing program, but decisions on financing go far beyond selection of a rate and maturity which would be successful in the market. Offerings are designed to achieve the proper economic and financial objectives in the money and investment markets, which may mean helping to contract or expand bank reserves, bank deposits, or corporate cash, or to influence capital outlays, consumer spending, personal savings, or other economic trends.

It follows that the selection of an interest rate for a Government security is only one aspect of a multiple decision regarding whom (investor class), how long (maturity), what (type of issue), and cost (interest rate). I should like to review in this connection some examples which have been referred to in the answers to other questions in this series.

1. Tax Anticipation Bills

In October and November 1951, two Tax Anticipation Series of Treasury bills were issued. The purposes of these issues were (*a*) to provide the Treasury with funds at a time when tax collections were seasonably low; (*b*) to provide the Treasury with appropriate maturities at a time when a large volume of funds would be flowing into the Treasury; and (*c*) to provide an investment medium for corporations accumulating funds to pay their taxes in March and June 1952. In order to provide a security to meet these objectives, all factors relating to the terms and conditions of the issue had to be taken into account together.

2. Series E Savings Bonds

When the Series E bond was set up in 1941, the objective was to provide a security which would be well adapted to the needs of small investors. With this in mind, a security was designed with a number of integrated features. The security was made nonmarketable, was given a limit of $5,000 annual purchase, was confined to purchase by individuals, and was given a 2.9 percent interest rate if held to maturity and graduated interest rates working up towards 2.9 percent if cashed within a shorter period. The security was made available in denominations of as low as $25. Each one of these factors was a part of the original decision and could hardly be separated from the others. It is impossible to say whether the savings bonds would have had greater or lesser sale if any one of the terms, including the interest rate, had been changed. But the fact was that when the savings bond decision was made, it was a decision involving the terms and conditions in their entirety.

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Because it is not possible to separate decisions with respect to interest rates from other decisions with respect to terms of Government securities, it is particularly important that the Treasury and the Federal Reserve work together at the time the Treasury financing decisions are being made. Accordingly, I do not favor legislation which would attempt to separate interest rate decisions from other financing decisions. The Treasury and the Federal Reserve must work together in carrying out their respective functions in assuring the success of the Government's financing operations.

In its management of the public debt, the Treasury welcomes and seeks the advice of the Federal Reserve; and conversely, the Treasury endeavors to cooperate with the Federal Reserve in effectuating its credit policies. We feel free to communicate our opinions to the Federal Reserve with respect to actions contemplated by them so far as they bear upon Treasury operations. The resulting interchange of information and judgment promotes an understanding of our common and individual problems and, in the overwhelming majority of cases, leads to cooperative action.

34. Do you believe that a rise in the average annual yield of series E savings bonds to 3½ percent, or thereabouts, would significantly increase the amounts sold and diminish the amounts of early redemptions?

In the answer to Question 26, I discussed in general terms the role of interest rates, both present and prospective, in influencing the demand for Government securities. The present question calls for a discussion of one particular instance of an interest rate change; namely, the probable effect on Series E savings bond purchases and redemptions of a rise in the average annual yield on these issues from 2.9 percent (the rate now obtainable when the bonds are held to maturity) to 3½ percent or thereabouts.

As I noted in the answer to Question 26, it is necessary in any realistic discussion of the role of interest rates in investor decisions to take account of a large number of other factors which may be operative at the same time. Much of the general discussion relating to this matter is relevant to the present question, and I should like, therefore, to summarize the major points in the answer to Question 26 before discussing the particular case of savings bonds.

It was noted, first of all, that there is no simple cause and effect relationship between higher interest rates and an increase in total amounts saved. Many other factors play a part in determining how much a given individual or the economy as a whole will save at any particular time. Moreover, the demand for Government obligations does not bear a fixed or even a necessarily close relationship to the aggregate flow of savings. There are numerous outlets for savings, and these are of varying importance at different times. Among the considerations other than interest rates which may have weight with investors at any given time are: (1) the level of income, particularly in comparison with that recently earned, and the nature of the savings objective, (2) the current availability of other investments, (3) the safety (or risk) factor involved in competing investment opportunities, (4) the economic outlook, (5) the size of liquid assets and the possibilities for "self-financing" of spending programs, (6) the condition of the equity markets, (7) the presence or absence of a national emergency (which may strengthen or weaken patriotic motives for buying Government securities), and (8) central banking and fiscal policy.

I think it is important to keep these broad considerations in mind in discussing the specific case of the effect of higher interest rates on both present and prospective savings bond holders. It may be expected that the majority of savings bond owners have certain special investment needs which are best met by a particular type of savings instrument. But, like all other investors, they are living in a dynamic economy, and their investment decisions are the result of a whole complex of factors which are constantly changing in weight and relative importance over a period of time.

It may be noted that in the period since the close of World War II—one of the most dynamic in our history—the decisions of investors with respect to savings bonds have provided an impressive demonstration of the value of this program to the American public. Holdings of Series E savings bonds amounted to $34¾ billion on December 31, 1951. This was $4 billion higher than the amount held at the close of the World War II financing period (February 28, 1946); and it was a quarter of a billion dollars greater than the amount held at the beginning of the Korean crisis. During the calendar year 1951 as a whole, gross purchases of Series E savings bonds amounted to almost $3¼ billion and the automatic reinvestment of interest accruals on amounts outstanding came to an additional $1 billion. These are large figures—larger than the public generally realizes; and they are significant both from the point of view of debt management operations and as an indication of the importance of savings bonds to individual savers at the present time.

The Treasury has found that savings bond buyers, generally speaking, fall into two distinct groups: (1) small savers, who are interested mainly in bonds of less than $100 denomination, and (2) purchasers with considerable investment experience and with substantial amounts of funds to invest, who are interested primarily in the larger denomination bonds. Because the characteristics of these two groups are so different, it is important to distinguish between them in discussing the potential effects of a higher interest rate on the sales and redemptions of savings bonds.

Treasury experience indicates that most people in the first group (the small savers) like to save through E bonds because of (1) their absolute safety and cash redemption feature, and (2) the convenience of the payroll savings plan. These factors apparently outweigh the importance of the interest rate actually being earned. With respect to this group in particular, therefore, the Treasury believes that an increase in the interest rate on Series E bonds from 2.9 percent to 3½ percent or thereabouts would fail to materially affect sales or redemptions. Some members of the group would undoubtedly be attracted by the higher rate and might, therefore, increase their purchases of E bonds. But we think that the great majority of persons who purchase the small denomination bonds—and this means the great majority of persons who buy savings bonds—would not be noticeably influenced by a rate change of the general magnitude indicated in the question.

I refer particularly in this connection to the bond buyers on the payroll savings plan, of whom there are now about 6,000,000, accounting for monthly purchases of about $120 million. A comparison with the period 3 or 4 years ago shows that the payroll savings plan has increased about one-third, both in number of people and in amount of monthly deductions. It seems likely, on the basis of our information and experience, that these figures would have been about the same if the interest rate had been moderately higher. Moreover, our experience with the smaller Series E bonds during the calendar year 1951 seems to strengthen these conclusions.

This 12-month period was one which was marked by considerable public discussion of the inflationary problem; with particular attention being given, at times, to the situation with respect to savings bonds. Yet sales of $25 denomination E bonds during 1951 were up 17 percent over 1950, while redemptions of bonds of this denomination were slightly less during these 12 months than they were a year previous. These figures seem to us to offer convincing evidence that Series E bonds meet genuine investment needs for the small saver; and that the features of absolute safety, redemption at the option of the owner, and convenience of purchase outweigh other factors to a very large extent.

I come now to the second group of savings bond owners—those who purchase the larger denomination savings bonds. During the calendar year 1951—the period in which sales of $25 denomination E bonds were up 17 percent—sales of $100 denominations were off 10 percent; $500 denominations, 24 percent; and $1,000 denominations, 33 percent. Redemptions of $100 bonds were approximately the same as in the preceding year (down 1 percent); but redemptions of the $500 and $1,000 denominations were slightly higher (up 2 percent and 5 percent, respectively).

These figures indicate that the larger investors are putting smaller amounts of their funds into savings bonds than had previously been the case. I might mention that, in recent months, this trend appears to have been moderating. But during the first half of 1951, in particular, it seems probable that a number of the larger investors were being influenced by the inflationary situation and were therefore showing greater interest in investments such as corporate stocks. It is possible that some of these investors with substantial funds would be influenced by a moderately higher rate under some circumstances; but there is no precise evidence bearing on the probable effect of a change to an interest rate of 3½ percent or thereabouts.

The Treasury is, of course, giving constant thought to measures which will be effective in encouraging the purchase and holding of Series E bonds. Savings bonds represent the cornerstone of the Treasury's program for spreading debt ownership as widely as possible among the people of the Nation. I consider this program to be one of the most serious responsibilities of debt management. Changes in the program and in the terms applicable to savings bonds have been made whenever these seemed appropriate—the most recent example being the new arrangement by which holders of maturing Series E bonds may continue their investments beyond the original 10-year period. It is possible that new circumstances will indicate further gains which may be realized from additional changes in the savings bond program or in other areas of Treasury financing and debt management. The over-all objectives which govern the Treasury's decisions in these matters—including its decisions with respect to interest rates—are discussed in detail in the answer to Question 2.

I should like to note, finally, that the discussion which was called for in the present question and in Question 26 relates largely to the problems associated with securing a maximum investment in one type of savings outlet; namely, Government bonds. The Treasury takes a broader view of its thrift programs. The primary objective of the savings bond program—and an objective which we have continually stressed—is the promotion of greater savings; not just savings in the form of Government bonds, but savings of all kinds. It has not been the intention of the Treasury to specifically compete by means of interest rates with established savings institutions. If the savings bond program succeeds in promoting thrift, savings bonds will benefit along with all other types of savings outlets.

It should perhaps be added, in this connection, that even if the Treasury wished to compete with other savings outlets, it is unlikely that any competitive advantage secured by raising interest rates would continue for long. Because of the size of the public debt and the interrelationships of interest rates in the economy, a change in the rate paid on savings bonds would undoubtedly be followed over a period of time by changes in the rates paid on other savings funds.

35. Discuss the advantages and disadvantages of requiring (a) all member banks or (b) all insured banks to maintain secondary reserves (in addition to present reserves) in the form of United States securities, either present issues or special types.

36. Discuss the advantages and disadvantages generally of maintaining bank reserves against classes of *assets* rather than against classes of liabilities as at present.

Questions 35 and 36 are so closely related that I would like to consider them together. Both questions involve plans which would be innovations in our approach to reserve requirements. The advocates of these plans argue that the need for innovation stems from the rapid growth of the public debt and the important changes which have occurred in the financial and economic structure of the country since the Federal Reserve Act was passed.

These matters are discussed in the answers to several previous questions, particularly Questions 30 and 31. In the answer to Question 30, I pointed out in some detail the way in which the wartime growth of the Federal debt to its present size has impeded the Federal Reserve in carrying out some of its traditional credit control operations. In the answer to Question 31, I discussed the important economic changes since 1913 which have affected the feasibility or desirability of continuing Federal Reserve operations in the traditional manner.

Now I would like to consider the impact of these matters on the commercial banks. The following table (repeated from the answer to Question 30) shows the assets of all commercial banks, classified by three broad groups of assets, as of June 30, 1914, 1929, and 1951:

	Amounts (in billions of dollars) June 30—			Percentage distribution June 30—		
	1914	1929	1951	1914	1929	1951
Reserves held in Federal Reserve Banks and cash	5	9	37	22	15	22
U. S. Government securities	1	5	59	4	8	36
Loans, other securities, etc	17	48	70	74	77	42
Total assets	23	62	166	100	100	100

The impact of the large growth in the Federal debt is clearly revealed in the figures. In 1914, commercial banks held $1 billion of Government securities as against $17 billion of "loans, other securities, etc." In 1951, holdings of United States Government securities totaled $59 billion, while the loan group stood at $70 billion. It might be noted that during most of the period since the end of World War II, holdings of Government securities exceeded the loan group by a substantial margin.

Federal securities are unique, of course, in the fact that they rank No. 1 both in terms of safety and liquidity. Obviously, the shorter maturities stand out as secondary reserves which can be quickly converted into actual cash or reserves at the Federal Reserve Banks. At the end of June 1951, $20 billion, or one-third of the Government securities held by commercial banks, consisted of short-term issues maturing within one year.

So long as banks possess large amounts of early maturing Treasury securities, they feel that they can always obtain substantial funds for further loan expansion. As noted in the answer to Question 22, when banks let their securities run off at maturity, the Treasury must, of course, find funds with which to pay the bank holders of maturing issues; the controlling factors here, therefore, are related to the sources of funds which the Treasury is able to tap at the time.

In the days when commercial banks held only moderate amounts of marketable securities (and most of their earning assets consisted of direct loans to customers), the total amount of their loans was highly sensitive to restrictive action by the Federal Reserve authorities. If the Reserve Banks sought to restrain an expansion of loans by discouraging member bank indebtedness (by charging higher rates for discounts and advances and by scrutinizing requests for them more closely), the member banks as a group were forced to curtail loan expansion. An individual bank might temporarily obtain funds for further loan expansion by selling a portion of its marketable securities, but it was not likely to do this for long since all banks find it prudent to maintain a secondary reserve of such securities.

In consequence of their large holdings of highly liquid Government securities today, the commercial banks are now able to offer considerable resistance to an effort by the Federal Reserve authorities to get them to curtail their expansion of business loans. If the Federal Reserve authorities refuse to make additional reserves available, the commercial banks can sell some of their Treasury securities in the market. If the market is congested and they do not find ready buyers, the commercial banks may turn some of their short-term Treasury securities into cash when they mature in order to obtain funds for further lending.

Under these circumstances, it may be argued that the Federal Reserve holds only a very loose string over the volume of bank credit. There is considerable difference of opinion over the probable results of pulling the string very hard. With such a large volume of secondary reserves, the effect of tight credit policy may be felt primarily in the Government security market with only secondary, and perhaps minor, results on the volume of bank loans. This is discussed more fully in the answer to Question 30.

Most of the proposals to levy new types of reserve requirements are offered in order to give the Federal Reserve more direct control over the volume of bank loans. The various plans fall into three categories, namely, (1) the secondary reserve requirements plan; (2) the asset classes reserve plan; and (3) the loan expansion plan. I would like to discuss each of these plans in broad outline. It should be understood that there are a great many variations of each of these three plans. Our purpose will be to consider the general principle in each case, rather than to elaborate on the different versions which have been discussed from time to time.

1. The Secondary Reserve Requirement Plan

The idea behind the secondary reserve requirement plan is to impose a special reserve requirement which could be met by the holding of certain designated classes of Government securities. This requirement would be supplementary to the present reserve requirements which are met only by depositing cash in the Federal Reserve Banks.

A simple illustration may be described. Suppose that a bank were required to hold a reserve equivalent to, say, 5 percent of its demand deposits in the form of Treasury bills and certificates (or cash deposited in the Federal Reserve if it wished), over and above its present reserve requirements. Thus, a large member bank in New York City or Chicago would be required to hold reserves equal to 24 percent of its demand deposits in the form of deposits with the Federal Reserve Bank (the present requirement), plus a 5 percent reserve in the form of Treasury bills and certificates held in its own vaults—a total of 29 percent.

This illustration is useful to show how the plan might work. Obviously many variations are possible, and the effect of the plan could vary from a mild requirement to a stringent one.

How large would such a secondary reserve requirement have to be to immobilize an important part of the secondary reserves held by the banks? Opinions will vary.

Some people feel that the secondary reserve requirement would have some restraining effect even if it were relatively small. This is because the banks could be expected to maintain considerable holdings of marketable Treasury securities, in excess of the new legal requirements, for ordinary purposes of safety and liquidity. All banks strive to maintain a portion of their assets in marketable securities to provide liquidity and to take care of emergencies. This is especially true at this time, inasmuch as the total deposits and total assets of banks have grown very much faster in the past 15 years than their capital. This has led to reduced capital ratios, and a tendency for many banks to carry a larger volume of securities to provide liquidity than they formerly did. The influence of the supervisory authorities has been exerted in this same direction both in an effort to keep capital ratios from declining and in order to hold down nonessential lending to help ease inflationary pressures.[5] In consequence, the amount of Government and other high-grade securities that banks feel free to liquidate in order to satisfy a demand for loans is probably smaller than appears at first sight.

It may be argued, therefore, that a modest secondary reserve requirement would have some effectiveness in locking up secondary reserves and restraining loan expansion. It would, of course, be possible to make provision for administrative modification of the secondary reserve requirement in hardship cases, and to provide that the requirement take effect in instalments over a period of time if that were necessary.

The secondary reserve plan when first introduced might utilize designated classes of outstanding Treasury issues as in the preceding illustration, and it could then shift to the use of a special obligation for this purpose. Alternatively, a special obligation might be used from the start. The use of a special security would offer certain advantages but is not an essential feature to begin the plan.

The special security, if used, could be made redeemable on the demand of any bank. Despite this feature, the Treasury would never experience a net drain to the banks, as a whole, through redemptions unless the banks themselves were experiencing a reduction in their deposits or reserve requirements were reduced. The rate of interest to be paid on the special security could be determined periodically by a formula, such as the average yield of appropriate marketable Treasury securities. The Treasury and the Federal Reserve would, of course, work together in the day-to-day decisions concerning the handling of the special security.

A brief summary of the advantages and disadvantages of the secondary reserve requirement plan is presented below.

Advantages

(1) The banks would in most instances be made more responsive to Federal Reserve actions intended to hold down the volume of business loan expansion through reduction of the potential credit base.

(2) The market for Government securities would be insulated in some degree from Federal Reserve efforts to control loan expansion. A restrictive credit policy would not set off as much large-scale selling by banks (or run-offs of maturing issues) as at present.

(3) Reserves to meet the new requirements would continue to be bank earning assets, in contrast to an increase in cash reserve requirements of the present kind upon which no interest is paid.

(4) If a special type of Treasury security were introduced as a vehicle for holding the required secondary reserves, the Treasury would fund (except for possible changes in interest rates and reserve requirements from time to time) some portion of the outstanding marketable Government obligations in bank hands. The frequent

[5] For a discussion of the economic roles of bank examination and bank supervision, respectively, see the answers of the Comptroller of the Currency to the questions addressed to him.

refunding operations otherwise necessary for this portion of the debt would be eliminated, and some churning around in the market, as switches were made by banks between various issues, might be avoided.

Disadvantages

(1) The freedom of action of banks in administering their assets would be reduced, but this is necessarily true of any form of increased reserve requirement.

(2) The plan might be criticized as a device partaking of the nature of compulsory sales of securities to banks. There might be charges of efforts to get interest rates too low, or of making it too easy for the Treasury to borrow from the banks.

(3) A secondary reserve requirement would probably have very uneven effects because of the great variation in security holdings of different banks. A secondary reserve requirement high enough to absorb a substantial part of the holdings of many Eastern and Midwestern banks would be too severe for many Western banks which have a high ratio of loans to total assets and a correspondingly smaller proportion of Government securities. On the other hand, a secondary reserve requirement low enough to take account of the needs of these banks would not absorb much of the holdings of other banks. Wide variations of this kind occur even within particular localities.

(4) The adoption of a secondary reserve requirement might bring on some degree of market disruption as banks sold longer-term securities to restore their liquidity position. This might lead to a need for net purchases by the Federal Reserve, thereby offsetting at least some of the gain of locking up a certain amount of secondary reserves.

(5) An important point raised in the present question concerns whether, if a secondary reserve proposal is to be adopted, it should cover only member banks or all banks insured by the Federal Deposit Insurance Corporation. This is a serious problem. To confine it to member banks would be unfair, yet I feel that we should not lightly interfere with our dual banking system by extending Federal Reserve control in this way to all insured nonmember banks.

It is sometimes suggested that there would be advantages in looking beyond the member-nonmember or insured-noninsured bank groupings to use a size criterion instead in applying secondary reserve requirements—for example, the secondary reserve requirement might be applied to all banks with deposits in excess of $5 million. This approach would cover all large banks, including some quite sizable banks which are not members of the Federal Reserve System. On the other hand, it would exclude all small banks whether or not they are members of the Federal Reserve System. Only one-fourth of the banks of the country have deposits in excess of $5 million, but these banks hold well over three-fourths of total commercial bank holdings of Government securities. The exclusion of the large number of small banks would reduce the administrative burden of applying the proposal, and would exempt from it most of the banks for which it would create hardship. While this type of coverage for the security reserve proposal would seem to avoid creating additional competitive advantages and disadvantages as between member and nonmember banks, it might still be an awkward arrangement.

(6) Another objection of considerable force is that commercial banks would be placed at a competitive disadvantage as against insur-

ance companies and other nonbank lending institutions. It is well known, for example, that life insurance companies in recent years have, in many instances, competed directly with commercial banks in offering loans to business borrowers. A secondary reserve requirement that would slow up an expansion of business loans by banks might only encourage further inroads in the field of business lending by their competitors. What is even more significant, a considerable amount of business loan expansion could continue by this means at the very time when the Federal Reserve authorities desired to curb such expansion. It is noteworthy that in recent years some nonbank investors sold large amounts of Government securities on the market to raise funds for loans; the Federal Reserve bought these to avoid a disruptive market, thereby creating additional bank reserves. The commercial banks had nothing to do with this, yet the Federal Reserve was understandably worried over the resultant easing of commercial bank reserve positions. This raises the question as to whether the secondary reserve plan would be equitable if applied only to banks and did not cover nonbank investors in some similar way. That is, if secondary reserves are to be locked up to some extent, should the immobilization be limited to banks or cover other potential sellers of Government securities as well?

(7) Other practical difficulties would doubtless arise in any specific application of the proposal. In addition, various questions remain to be answered. For example, if a special security were used for this plan, should the special Treasury security be offered only in amounts determined by the Federal Reserve authorities? It is obvious that the Treasury and the Federal Reserve would have to work out many details to make the plan operate effectually.

* * * * * * *

The foregoing statement gives the major advantages and disadvantages of the secondary reserve requirement plan in general. Judgments will differ on the net balance of these factors and, of course, will vary also as different versions of the plan are considered.

In concluding the comments upon this proposal, it may be noted that the Board of Governors of the Federal Reserve System proposed a variation of this plan after World War II, and that a number of Western European countries have adopted some form of it. (See the answer to Question 43.)

2. Asset Classes Reserve Plan

The asset classes reserve plan proposed by some people is a plan to substitute bank reserve requirements levied against classes of assets for the present requirements against deposits.

In the initial shift to this plan, total cash reserve requirements for member banks could be made the same as at present if that were desired; banks might, for example, be required to carry fairly large reserves against loan assets (loans and "other" investments) and smaller reserves against United States Government securities. This shift in itself would discourage further expansion of loans and would encourage the holding of Government securities. The requirements could, of course, be altered from time to time to work toward the desired economic objectives. This plan has the same objective as the proposal to institute secondary reserve requirements. As noted above, that proposal is designed to lock up secondary reserves in some degree so that the Federal Reserve could better control the volume of bank loans. The asset classes reserve plan would aim at the same purpose by imposing varying reserve requirements directly upon loans and other classes of assets.

The brief statement which follows applies to the general principle of the plan. Many of the points made are similar to those cited in the preceding discussion of the secondary reserve plan.

Advantages

(1) The banks would be made more responsive to Federal Reserve actions intended to hold down loan expansion.

(2) The market for Government securities would be shielded to some degree from the market pressures of a tight credit policy.

(3) Increases in reserve requirements under this plan would have less effect on bank earnings than under the present system. Banks would be under less pressure to shift out of Governments into loans in an effort to maintain their earnings position.

(4) The present system of reserve requirements is no longer as logical as it used to be, and may even be deemed to be inequitable. Banks of similar size located in different cities are subjected to different reserve requirements. This arises because the present method of imposing reserve requirements depends largely on the location of the bank rather than its asset or deposit structure. Differentiation by class of assets might be more logical—at least from the point of view of credit control policies—than differentiation by location of bank.

(5) It may be noted here that the asset classes reserve plan might in the long run come to be better understood as to basic purpose than the secondary reserve plan—which might conceivably be interpreted more as a measure of coercion forcing banks to hold Government securities than as a tool of credit control. The asset classes reserve plan gives a banker the freedom to make his own decisions, but encourages him in the right direction by charging him a higher price in reserve requirements if he is moving contrary to Federal Reserve policy.

Disadvantages

(1) More centralized controls would be introduced to influence bank managements in credit policy. At present, each bank determines how to place its own assets within the framework of broad Federal Reserve actions; but under the assets classes reserve plan individual banks would be influenced as to precise classes of investments and loan groups. This could conceivably result in extremely centralized dictation.

(2) The Government might be criticized on grounds that the central bank was using its powers to compel holding of Treasury securities. This might be interpreted as part of a program for forcing low interest rates.

(3) It would be almost impossible to make the plan flexible enough to provide for a satisfactory change-over from the present system. Even if aggregate reserve requirements remained unchanged for the banking system as a whole, this approach would mean an increase in required reserves for some banks and a decrease for others. What kinds of banks would these be, respectively? A great deal would, of course, depend on the details of the specific plan as to how assets were classified for reserve requirements.

Some observations can be made, however, which would probably pertain to any system of asset classes reserve requirements if imposed at the present time. It may be assumed that loan assets would carry heavier reserve requirements than Government securities since one of the principal objectives at this time would be to keep banks from liquidating Government securities in order to expand loans.

Substantially increased reserve requirements would probably result for two kinds of banks. (a) Banks with relatively large loan assets would experience relatively heavier reserve requirements. (b) Banks with relatively large time deposits would also find themselves facing a substantial increase in required reserves because time deposits on the present basis carry relatively light reserve requirements. (Perhaps this difficulty could be avoided by a formula permitting time deposits, at least temporarily, to be allowed as a credit against loans in calculating reserve requirements.)

(4) It might be more difficult to provide the desired amount of seasonal flexibility for various local areas. For the banking system generally, the heavy demand for loans tends to occur in the latter part of the year. For a bank in an agricultural area, for example, bank loans tend to change in relation to crop movements. If loan assets were to carry relatively large reserve requirements, such a bank would find itself subjected to a seasonably strained reserve position quite apart from what was happening to its total deposits. While such a bank could presumably get adequate accommodation by borrowing from a Federal Reserve Bank, it would have to borrow more under the asset classes reserve plan than it would under the present system.

(5) To be effective and equitable, nonmember banks ought also to be subjected to similar requirements. The asset classes reserve approach could not resolve this difficulty by excluding small banks (as might be possible under the secondary reserve plan) without considerable confusion, since the old system would presumably still be in effect for the smaller member banks. Yet it seems likely that the adoption of an asset classes reserve plan for banks generally would tend to hit the small banks harder than the large ones under present circumstances. This tendency would occur because small banks have relatively large time deposits and loans. Thus, an asset classes reserve plan which would leave aggregate reserve requirements for the country unchanged would tend to reduce reserve requirements of the larger banks and to increase reserve requirements of the smaller banks. This has implications which would certainly require careful study if such a plan were to be seriously considered, inasmuch as the small member banks, who are already most acutely aware of nonmember competition, would be most severely penalized.

(6) There is also a competitive problem posed by nonbank financial institutions who compete actively with banks in the lending business. Would a similar system of reserves against asset classes be needed to control credit extended by such institutions?

It seems clear from this brief listing of advantages and disadvantages that the asset classes reserve plan has severe practical difficulties. Obviously, these practical difficulties would have to be weighed very carefully, for we are dealing with an operating system of banking which has developed over the years.

3. The Loan Expansion Reserve Plan

The brief statement just concluded applies to the general principle of the asset classes reserve plan. As noted earlier, there are many variations possible and the advantages and disadvantages will presumably vary also for different versions of the central idea. The principal hurdle for these plans is the great variation in the asset composition of banks, making it extremely difficult to shift from the present system of reserve requirements against deposits to reserve requirements against classes of assets with heavier requirements against loans—in the circumstances of today—than against Government securities.

A compromise plan has been discussed which would help meet this problem. This is the so-called loan-expansion reserve plan. This would keep the present system of reserve requirements, but would superimpose a requirement levied against increases in loans over a base period. There are many variations of this idea, but the central theme is to slow up expansion in bank loans under present circumstances by increasing the reserve requirements of any bank which is expanding loans.

The idea is subject to many of the advantages and disadvantages cited above. It would have the particular advantage of hitting at credit expansion on a specific basis without requiring any elaborate changes in our system of reserve requirements. Furthermore, this plan would not involve the serious transition problems which are raised by the asset classes reserve plan. It needs a great deal of study, with regard to the effects on individual banks and localities however, to insure that it would not work out unfairly or in ways which would hinder our national production. In any event, the loan expansion reserve plan should be considered as more of a stopgap measure than some of the other reserve plans, since it would become progressively less appropriate as the base date receded further into the past.

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The three plans discussed in this answer all utilize the principle of reserve requirements to provide additional direct restraint against bank loan expansion. Many versions of these plans may be proposed and undoubtedly new plans will appear from time to time.

There are also proposals to limit the volume of bank loans by imposing direct controls of one kind or another. These plans are discussed in the answer to Question 39.

37. Discuss the advantages and disadvantages of marketable and nonmarketable securities (a) under present conditions; (b) in the event of the necessity for substantial net Government borrowing.

Over a period of time, the Treasury has issued securities with a wide variety of terms and conditions. The securities now outstanding, when classified with respect to their marketability characteristics, may be grouped into five main categories:

(1) Securities which are fully marketable, such as issues of bills, certificates, notes, and certain bonds.

(2) Securities which are marketable, but are restricted as to ownership by commercial banks for a designated period of time. The Victory Loan 2½ percent bonds are an example of this category.

(3) Securities which are not marketable, but are redeemable in cash over a period of time before maturity according to a specified schedule of values. Savings bonds and savings notes are issues of this type.

(4) Securities which are not marketable and not redeemable in cash before maturity, but are convertible before maturity into a special note issue which is in turn marketable in character. The 2¾ percent Investment Series bond issued in 1951 is the only issue of this type outstanding.

(5) Securities which are not marketable and are issued only to Government investment accounts. The terms and conditions of some of these issues are provided for by statute. Special securities issued to the Federal old-age and survivors insurance trust fund are an example of this type of issue.

The table which follows classifies the interest-bearing debt as of December 31, 1951, into the above five categories:

Category:	*Amount (in billions of dollars)*
1. Fully marketable	107
2. Marketable, but bank-restricted	36
3. Not marketable, but redeemable in cash	66
4. Not marketable, but convertible	12
5. Not marketable, special issues	36
Total interest-bearing debt	257

As shown in the table, fully marketable issues are the largest single category of these five groups. Percentagewise, however, this category represents only 41 percent of the debt, a much smaller percentage than existed twenty years ago, for example, when fully marketable securities comprised 98 percent of the debt. This is shown in the following table:

Category	Dec. 31, 1931	Dec. 31, 1941	Dec. 31, 1951
	Percent	*Percent*	*Percent*
1. Fully marketable	98	75	41
2. Marketable, but bank-restricted	0	0	14
3. Not marketable, but redeemable in cash	0	14	26
4. Not marketable, but convertible	0	0	5
5. Not marketable, special issues	2	11	14
Total	100	100	100

As the debt grew during the past 20 years, the objective of the Treasury was to design securities which met the needs of the various investor classes as closely as possible, while at the same time satisfying the needs of the Government and the economy as a whole. This is discussed in the answer to Question 38. The main result of this policy has been to provide a wider variety of issues than had heretofore existed and a greater proportion of nonmarketable securities.

The Treasury does not have any predisposition toward a particular type of issue either marketable or nonmarketable. If a marketable security suits the needs of a particular investor class and at the same time satisfies the needs of both the Government and the economy as a whole, we may issue it. If, on the other hand, a nonmarketable instrument would do the job better, we would prefer to issue that. On some occasions, we have issued both types of securities simultaneously to satisfy the differing needs of a particular investor class. An example of such action is the regular issuance of both savings notes and fully marketable short-term obligations to meet the requirements of corporate investors throughout the war and postwar periods.

The advantages and disadvantages of marketable and nonmarketable securities are taken up in the paragraphs that follow. Before starting this discussion, I might note that the present question asks that each of these types of securities be considered separately: (a) under present conditions, and (b) in the event of the necessity for substantial net Government borrowing. The Government is borrowing substantial amounts this fiscal year, and expects to do so again next year. Thus (a) and (b) both appear to be cases related to a budget deficit. The question may, however, aim at distinguishing between the cases of a budget surplus and a budget deficit. In any event, it is my opinion that, as far as the matter of marketable versus nonmarketable securities is concerned, the budget position is not the major factor, as long as the objective is to provide securities best suited to the needs of the various investor classes in harmony with economic conditions and with the other Treasury objectives as outlined in the answer to Question 2.

1. Marketable Issues

(*a*) *Advantages.*—Marketable issues of Government securities have certain advantages from the standpoint of the Government and from that of the investor:

(1) They are flexible in their use. They can be bought and sold for immediate delivery or delayed delivery, borrowed and lent, pledged as collateral, deposited as security for fulfillment of a contract, sold under repurchase option, and can be used to satisfy numerous particular situations. They have legal advantages, also—such as advantages with respect to ownership, title, etc.—because they are issued typically in bearer form. Transactions in marketable securities are, therefore, typically covered by the anonymity of the market place. No one (except the dealer involved) knows who is buying or who is selling. Many investors consider this an important advantage of marketable securities because of the confidential nature of their transactions in them.

(2) They permit a greater degree of fluidity in the capital markets. The position of a particular investor frequently varies from that of the investor class as a whole. Some insurance companies, for example, may be selling securities at the same time that other insurance companies are buying securities. The marketability feature of Government bonds allows these intra-investor group adjustments to be made with a minimum of friction. The market serves an important function in this respect, which is prized highly by managers of security portfolios. The redemption provision attached to nonmarketable securities could, of course, accomplish in theory most of the necessary adjustments of this type. Such adjustments would have to be carried out by the Treasury redeeming the securities offered by the sellers and issuing new securities to new buyers. The Treasury, in effect, would be performing the market function. This could be done; but it is a cumbersome procedure for the public, especially for short-term shifts in funds.

(3) Marketable issues are similar in form to most issues put out by corporations and State and local governments. Purchasers of large

amounts of securities and managers of large investment portfolios are accustomed generally to obligations of this type. Accordingly, other things being equal, many large purchasers of securities may prefer marketable obligations to nonmarketable obligations, and may be willing to pay a better price for them. This would be particularly true in cases where constant speculative adjustments are made in portfolios.

(4) The very existence of an adequate volume of marketable Government securities in all maturity areas gives the Federal Reserve a certain amount of flexibility in expanding or contracting the credit base whenever such action seems desirable. The Treasury has flexibility, too. Under conditions of increasing interest rates, it can sell new securities with higher coupons without concerning itself at once with redeeming outstanding obligations. This can be a problem with nonmarketables when rates move so far that it pays holders of such issues to cash them in.

(*b*) *Disadvantages.*—In recent years, marketable issues of Government securities have come to have some disadvantages.

(1) The first of these disadvantages arises because the Government debt of more than $250 billion has been created so quickly and has become such a predominant factor in the high-grade securities market. If all of this debt were marketable, it might float around loosely and there might be wide movements and swings in prices and yields arising from temporary or special situations. This might have far-reaching repercussions on the prices and yields of other securities, such as municipals and corporates. The capital resources of banks, insurance companies, and other savings institutions, viewed from the standpoint of market values, could either be increased materially or cut drastically in a short period by such developments.

(2) There are now important groups of investors who want to own Government securities, but for whom the price fluctuations of the marketable issues are a drawback. These, primarily, investors want safety of principal. They consider their investment in Government securities as an alternative to a deposit in a bank. And they want the certainty, as in the case of bank deposits, of getting 100 percent of their money returned to them upon demand. This group of investors includes particularly the small individual investor who buys savings bonds. It also may include the treasurers of large corporations and the managers of State and local investment and operating funds. Many of these have preferred nonmarketable Treasury savings notes, on many occasions, to marketable short-term Treasury securities because of the absence of fluctuations in market prices.

(3) Marketable obligations have certain unsatisfactory attributes for the investment of Government trust fund accumulations. On a single day, for example, the Federal old-age and survivors insurance trust fund may have $100 million to invest in long-term bonds. Obviously, these could not be acquired in the market without sharp price effects. This would be a temporary disturbance to the market and would be entirely apart from normal market supply and demand forces. Special provisions involving the issuance of nonmarketable securities by the Treasury for the investment of these funds as they become available have been found to be an appropriate solution to this problem.

2. Nonmarketable Securities

The question asks for a discussion of the advantages and disadvantages of nonmarketable securities, in addition to the discussion on marketables. Obviously, nonmarketables are so designed that their advantages take care of most of the disadvantages of marketables. The discussion that follows necessarily takes up again, therefore, some of the points that have already been covered.

(*a*) *Advantages.*—(1) As the public debt grew, it became apparent that nonmarketable securities would have some important advantages both to the Government and to the various investor classes. Nonmarketable securities could, for example, be designed to reduce the volatility of the debt by encouraging firmer holding. In the case of savings bonds, for example, the interest pattern was constructed so as to reward purchasers for holding them to maturity. In the case of the Investment Series B bond issued in 1951, the investor can today convert into cash only with a capital loss, since the 5-year notes which may be obtained in exchange are selling below par. The penalty on redemption will, of course, vary with the movement of money rates; and, at some future time, he may be able to avoid that loss.

Some of the nonmarketable issues encourage investor retention also by the inconvenience of their conversion into cash. Series F and G savings bonds can be redeemed only upon one calendar month's notice, for example; and, as mentioned previously, the 2¾ percent Investment Series bonds require a conversion into notes as the first step in the cashing process. A marketable obligation, on the other hand, may often be sold and turned into cash with a minimum of delay and effort.

(2) The issuance of nonmarketable securities in addition to marketable securities makes it possible to offer each class of investor the type of issue which will stimulate maximum investor participation and satisfaction. For example, to assist in attracting individuals' savings into Governments, the Treasury has offered a somewhat higher yield to individual investors than would be necessary to attract bank or other institutional funds. A nonmarketable security such as the registered savings bonds permits this to be done.

(3) Nonmarketable securities reduce the volume of buying and selling and the speculation that goes on in various areas of the Government security market. Many institutions and investor classes own large volumes of Government securities that they consider as more or less permanent liquid reserves. Continued refunding of such securities and the buying and selling that occurs in order to take advantage of temporary market situations can be avoided or reduced when a large portion of the debt is in nonmarketable form.

(4) Nonmarketable securities permit the Treasury to pay a particular investor an appropriate rate of interest for the exact period for which he holds the Government securities sold to him. The Treasury has much less control over this matter when marketable issues are sold. In the situation that developed in the market in 1948, for example, buyers of long-term bonds were able to get the long-term rate for what turned out to be a relatively short period of Government security ownership.

(5) Nonmarketable securities redeemable in cash permit the Treasury to handle liquidation problems of particular investor classes in an

orderly manner without market disruption. When one investor class is selling marketable Government securities on balance, for example, and another investor class is making net purchases, the needs of the buyer frequently cannot be met by the type of security being liquidated at that particular time. An issue with new characteristics to meet the requirements of the new purchasers would be much more appropriate. For example, banks or business corporations require securities that are different from those that might be sold to insurance companies or other long-term investors. To the extent that an exchange between classes is handled through the Treasury—instead of through the market—it is possible to put out new issues appropriate for the buyer. This is particularly advantageous in the case of exchanges between two groups of nonbank investors.

(6) Nonmarketable securities provide some insulation from the marketplace which has advantages to investors holding them, to the Government, and to the market itself. From the investor point of view, risk is reduced. From the Government point of view, the amount of the debt which is exposed to market swings is reduced, thereby facilitating credit restraint operations by the Federal Reserve, which are less likely to cause unwanted repercussions than if the whole debt were marketable. From the point of view of the market itself, the advantage is that weak, volatile holdings are minimized.

(*b*) *Disadvantages.*—(1) Nonmarketable securities are less flexible than marketable issues. The advantages of marketable securities on this account have already been discussed; and there is no doubt that the nonmarketable issue is less flexible, particularly from the viewpoint of large institutional investors and the managers of corporate and State and local government accounts.

(2) Such nonmarketable obligations as Series E savings bonds are payable on demand; and there are people who feel that it is unwise for the Treasury to have such a large volume of demand obligations outstanding. This has never caused the Treasury any trouble, and I don't believe it is likely to in the future. Savings bonds are similar, in many of their economic aspects, to savings deposits in banks. Yet the banking system is not overly concerned with the large volume of savings deposits which are payable practically on demand. Banks recognize (particularly with Government deposit insurance) that no large segment of the population is likely to cash savings accounts at the same time. The same may be said of Government savings bonds. As a matter of fact, the rate of turnover on E bands (comparing redemptions with amounts outstanding) during the postwar period has been only half as high as the turnover experience of either the savings banks or the savings and loan associations, and even less when compared with savings accounts in commercial banks.

(3) Another disadvantage of nonmarketable issues redeemable in cash is the refunding problem posed whenever market rates of interest change materially. If market interest rates increase enough, for example, it may pay an investor to cash in his nonmarketable securities and buy marketables; and this might drain the Treasury's cash balance substantially and sharply. The Treasury could take care of this situation by offering existing holders the opportunity to acquire a new nonmarketable issue carrying a higher schedule of rates. This has been done in the past with savings notes. There are a relatively small number of savings note holders, however; the problem would be much

more complicated if savings bonds—with 500 million pieces outstanding—were involved.

It should be noted that this disadvantage of nonmarketable securities can be avoided mechanically to some extent by the issuance of nonmarketable obligations which are convertible into a marketable issue, instead of redeemable in cash—as has been done with the Investment Series B bond. The convertibility provision has a place in securities sold to a relatively small number of financial institutions and other long-term investors. I do not think it would be desirable in savings bonds sold to millions of small purchasers, nor in savings notes sold to the holders of large short-term balances.

The reverse of the above situation might occur if market rates declined. Investors might then shift from marketable to nonmarketable securities to improve their return. An instance of action along this line occurred in the short-term market in the summer of 1949. The approach of the Government under these circumstances becomes one of making the particular nonmarketable issue less attractive—or, if necessary, withdrawing it from sale entirely.

(4) Another disadvantage of nonmarketable securities which has been mentioned is that they do not necessarily operate in the right direction as business activity rises or falls. There may be a tendency at times for nonmarketables to be cashed too freely when the economy is at high levels, and held too firmly in depressed periods. Some people feel that marketable securities do not have this disadvantage because their value can be influenced up or down by the central bank to help induce people to hold them or cash them, depending on what the liquidity needs of the economy may be.

38. What new types of securities, if any, do you believe should be given consideration for use (*a*) under present conditions; (*b*) in the event of the necessity for substantial net Government borrowing? Give the merits and demerits.

The general objectives which the Treasury seeks to achieve through its management of the public debt are discussed in the answer to Question 2. Within the framework of these objectives new types of securities are considered from time to time by the Treasury in making public debt management decisions.

Over the years a major task in public debt management has been to design Government securities which will fit the needs of the various investor classes as closely as possible and at the same time suit the requirements of the Government and of the economy as a whole. As the public debt has increased and as the various investor classes have increased their holdings of liquid assets, the Treasury has made considerable use of new types of securities.

Savings bonds provide the best known example of a security that has demonstrated its success for the purpose intended. The Treasury designed them primarily to meet the needs of small individual investors. There are now three series of savings bonds being issued, each of which is designed to meet somewhat different investor needs. The combined sales of the three issues amounted to $4 billion in the calendar year 1951. The total amount of the three issues—Series E, F, and G—now outstanding is $57½ billion; E bonds alone account for $34¾ billion, an all-time peak for this series.

Savings notes provide another example of a security designed to meet particular investment needs. These were originally issued early in the war period primarily to provide an investment medium for tax reserves, and were then designated as tax notes. It soon became evident, however, that this type of issue would be suitable for short-term investors for purposes other than the accumulation of tax reserves—especially as a place to put liquid reserves of corporations which were being accumulated for their anticipated capital needs in the postwar period. In recognition of the broadening investment area served by this type of issue, a new series of notes—designated as savings notes—was issued in 1943. In all, five different series of these notes have been issued since 1941. Changes have been made in the terms of the notes, including the interest return, as the situation required.

During the past year, the Treasury has issued two other special types of securities—the new nonmarketable 2¾ percent Series B Investment Bond which is convertible before maturity into a marketable 5-year Treasury note, and two issues of the new Tax Anticipation Series of Treasury bills which mature on major tax dates. These new securities were offered after study at the Treasury and discussion with the Federal Reserve to meet particular situations that arose during the calendar year 1951.

The Treasury is always studying possible new securities, or revisions of existing ones. Whenever an area for investment in Government securities is developing, we study how best to tap that area. Suggestions on this account come to the Treasury nearly every day. Many of them refer to situations in which the amount of money involved, for the country as a whole, would be too small to warrant the issuance of a new security. Some of them have referred to situations which are promising, however; for example, the one associated with people who are trying to provide income for the time when they retire. It has been suggested that with the growing number of older people in our population, the Government should provide an investment medium for retirement purposes in convenient form in addition to savings bonds. This area of Government security investment may offer certain possibilities, and is being studied.

There is also the question of providing new securities designed particularly for pension funds. The pension fund movement has gained considerable momentum in recent years. An estimated total of $5 to $6 billion is invested in pension fund reserves of State and local governments—about one-half in Federal Government bonds and one-half in other securities, mainly State and local government issues. It is estimated that an additional $6 billion is invested in corporate pension funds—about one-third in Federal Government securities and two-thirds in other securities, mainly corporate bonds and stocks. It has been suggested to us that pension funds have investment problems that differ somewhat from the problems of other institutional investors, and that securities differing from the present types would better suit their needs. This is another of the matters being studied.

The question asks that proposed new types of securities be considered separately (*a*) under present conditions, and (*b*) in the event of the necessity for substantial net Government borrowing. The Government is borrowing substantial amounts this fiscal year, and expects to do so again next year. Thus (*a*) and (*b*) both appear to be cases related to a budget deficit. The question may, however, aim at distinguishing between the cases of a budget surplus and a budget deficit.

In this connection, I should like to point out that in the calendar year 1952 over $50 billion of the public debt will come due for refunding. The situation in subsequent years will probably not be very much different. Thus, there will be ample opportunity to introduce new types of securities that might be desirable regardless of the Government's budget position. A new type of security designed to provide for the needs of a particular investor class could be introduced just as well in a period of budget surplus as in a deficit period. The major question is the worth-whileness of the security itself.

39. Are there any ways other than those implied in the answers to the preceding questions for insulating public debt securities from the impact of restrictive credit policies designed primarily to discourage the growth of private debt?

The desire to insulate public debt securities from the impact of restrictive credit policies aimed at private borrowers is a relatively new development. Its purpose is to protect at least a portion of the public debt from sharp price fluctuations—and consequent market unsettlement—whenever the central bank wants to restrict credit expansion through the use of general credit control measures which affect interest rates. Few proposals have been suggested that promise anything like complete insulation of outstanding public debt issues from the impact of restrictive credit policies. The plans which have been offered would, if adopted, be only a step in this direction.

The nature of the problem and most of the measures which have been proposed in connection with it have been indicated in answers to other questions. Questions 35–36 request a discussion of secondary reserve requirements for commercial banks held in the form of Government securities, and of commercial bank reserves held against classes of *assets* rather than against deposits. In addition, in the answer to these questions, I have also commented upon the loan-expansion reserve plan which would impose additional bank reserves levied against *increases* in loans. The answer to Question 44 discusses devices used in foreign countries which have had the effect of insulating a portion of the market for Government securities from the private credit market.

The three measures discussed in the answer to Questions 35–36 all utilize the principle of bank reserve requirements to provide more direct restraint against bank loan expansion—and to discourage the sale of Government securities to provide the funds for such expansion.

There are, however, at least three other approaches to the problem which have been suggested: (1) Increased use of nonmarketable securities, (2) direct controls over loans, and (3) "moral suasion."

1. Increased use of nonmarketable securities

One approach to the insulation of a part of the Government security holdings of nonbank investors which has been suggested is to induce such investors to increase the proportion of nonmarketable Government issues held relative to marketable issues. This approach would protect their asset positions against book losses from possible market declines resulting from restrictive general credit policies. It would not necessarily prevent switching from Governments to private loans in inflation periods unless the nonmarketables could be redeemed only at fairly substantial discounts during such periods. (See also the discussion of marketable and nonmarketable securities in Question 37.)

2. Direct controls over loans

There have also been proposals to limit the volume of bank loans by imposing *direct* controls of one kind or another on loan expansion. The report of the President's 4-member committee on credit control, which was released in May of this year, points out that under existing authority the President has powers to regulate and limit by Executive Order the issuance of credit; and presumably, in the event that it ever became necessary to use this authority, it would be exercised by the imposition of direct controls on loans. One of the ways in which this could be done would be to place an absolute ceiling on the amount of loans that each individual bank can make, based on the level of the bank's loans in some past period. Another way would be to establish a loan ratio of some type—such as loans to total assets—for each individual bank, based on the ratio existing in some bench mark period. Numerous other variations of this type of control could be worked out. The same proposals conceivably could, of course, be incorporated into new legislation providing for direct controls on loan expansion.

3. "Moral suasion"

In addition to the above measures, it has been suggested that bank lending policies might be extensively influenced by the use of "moral suasion" by the central bank as is done in the United Kingdom. (See the answer to Question 44.) This device differs from the voluntary credit programs undertaken in this country in that the commercial banks in the United Kingdom are more or less obliged to follow the credit policies laid down by the Government and carried out by the central bank. It would, however, be much more difficult to effectuate this type of policy in the United States where a total of over 14,000 banks would be involved. The United Kingdom has a system of branch banking and by far the greatest portion of the banking needs of the country are met by a small number of banks. For example, the 11 London clearing banks hold 96 percent of the total assets of all of the banks in England and Wales. It is a relatively simple matter, therefore, for the central banking authorities to influence actions by means of direct discussion of credit policies and the reasons for them with the principal officers of each of the banks in the country.

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The devices discussed so far have been suggestions related to the lending policies of banks. The problem of insulating public debt securities from the impact of restrictive credit policies aimed at private borrowers is not, however, a problem of commercial bank holdings of public debt alone. During the period since the end of World War II, lending by financial institutions other than commercial banks has risen rapidly. Funds for some of this lending have been obtained by the sale of large amounts of the holdings of Government securities of such institutions. Lending by nonbank institutions has not traditionally been regulated by credit controls, except as selective credit controls in such areas as consumer credit and real estate credit have affected borrowers regardless of the source of the loans. It has been suggested, however, that in order to insulate or immobilize the large Government holdings of nonbank lending institutions—as well as those of banks—from the impact of restrictive private credit policies, it may be necessary to bring nonbank lending under some type of control also.

The methods described above for the *direct* control of bank loans and for the use of "moral suasion" to restrict credit expansion could also be applied to nonbank lending institutions. The emergency powers of the President to regulate and limit the issuance of credit are not confined to bank credit; they relate to all types of credit. It is possible, therefore, that loan ceilings of the type suggested for banks could be devised for nonbank lending institutions as well. It is also possible that the use of "moral suasion" could probably be made more effective so far as nonbank lending institutions are concerned than in the case of banks, since the number of nonbank institutions is much smaller than the number of banks. This is particularly true in the case of insurance companies, where relatively few companies account for the bulk of the lending.

The possibilities discussed in this reply are meant only to indicate certain types of measures which have been suggested. It is obvious that a careful study of the possible effects of any plans of this type would be required before appropriate consideration could be given to them.

40. Under what conditions, if any, do you believe it would be desirable to resort to compulsory methods in the sale of Government securities to (*a*) banks, (*b*) other financial institutions, (*c*) other corporations, (*d*) individuals? Discuss the philosophy which underlies your views on this matter.

I do not believe that any direct answer can be given to the question of "Under what conditions, if any, do you believe it would be desirable to resort to compulsory methods in the sale of Government securities . . . ?" Undoubtedly, such a program would be given consideration only during a period of extreme national crisis. Its practicality even in such a period, however, would depend on the financial, economic, political, and psychological circumstances prevailing at the time; the type, extent, and possible duration of the emergency; and the background of revenue measures and borrowing operations immediately preceding the institution of the new program. I see nothing on the horizon that would involve the need for compulsory sale of Government securities.

The only practical ways which I know of for putting compulsory borrowing methods into effect would be through some use or adaptation of the tax mechanism or the reserve requirement mechanism. The former could be used by levying a tax—presumably on corporate or individuals' incomes, or both—which would be refundable at a later date. The reserve requirement mechanism could be used in various ways to require financial institutions to keep a designated proportion of their assets in the form of Government securities, as has already been discussed in the reply to Questions 35–36.

The most familiar forms of compulsory lending making use of the tax mechanism are refundable income and excess profits taxes. Both Canada and Great Britain used compulsory loans in World War II in the form of a refundable portion of the individual income tax, and the Victory Tax in the United States originally had a postwar credit feature. All three countries made part of their corporate excess profits taxes refundable after the war. In a sense, the social security system might also be thought of as making some use of the refundable tax principle, since the payments which the insured participant must make are returnable later in the form of benefits.

With the exception of the social security mechanism, proposals for compulsory lending generally grow out of a consideration of the obstacles encountered both by taxation and by voluntary lending under the urgencies of defense or war financing. During such a period, inflationary pressures are bound to be severe. The Government, to the greatest extent possible, must avoid the use of financing measures which contribute to these pressures. Likewise, spending and consumption in excess of what is necessary to maintain efficiency and to bring about maximum production for defense must be curtailed.

Taxes, of course—if they could be high enough—would fulfill both of these purposes. The reasons why compulsory loans are urged as a substitute for part of the additional taxes needed during a defense or war period are, generally, that they are less open to (1) the equity objection that heavier taxes will unduly burden those with low incomes or large fixed savings commitments, and (2) the incentive objection that taxes dull the will to work and save.

Compulsory lending is also urged as a partial substitute for voluntary lending—quite apart from the question of its advantages in keeping the tax burden from becoming too great—on the grounds, among others, that it would bring slackers into line and would avoid building up a dangerous inflationary backlog of readily cashable bonds.

I shall examine these arguments in terms of the practical results which we might expect from a compulsory lending program, on the assumption that such a program would be operating in a defense or war economy with its attendant problems of heavy Government expenditures, civilian shortages, and ever present inflationary pressures.

1. Individuals

In the case of individuals, a refundable tax would raise a number of practical problems, of which the following might be mentioned as the most important:

a. Would a refundable tax make it more difficult to increase ordinary taxes at a time when such an increase would be both desirable and necessary to promote the best interests of the country?

b. Would it seriously affect our voluntary sales program to sell securities to individuals?

c. Would it increase the Government's financing problems in the transition period following the defense or war emergency?

The first problem—relating to the effect on our revenue system—would need a most careful consideration in the light of the surrounding circumstances. If taxes were already so high that further increases would hold the risk of causing serious inequities and endangering the incentives to work and save, a refundable tax might offer some limited possibilities. Our present tax system, however, has proved to have great strength and flexibility in time of national emergency; and we should want to be very sure of our ground before introducing a new element which might prove to be a weakening influence.

With respect to the second problem—the probable effect on the Treasury's voluntary sales program—some difficulties would undoubtedly arise. A refundable tax, like ordinary taxes, would have to take into account the position of those who are hardest pressed within each income bracket. When this had been done, there would still be funds available for investment which had not been reached by tax levies. Such funds, in fact, were the main objective of the voluntary sales programs of World War II. Under a system that combined ordinary taxes with refundable taxes many individuals with investable funds might feel that their whole duty had been done because of the compulsory lending feature of the refundable tax. Net voluntary sales of securities to individuals in these instances might, therefore, be considerably reduced.

Furthermore, the possibility that existing assets would be liquidated by some purchasers to compensate for the refundable tax would have to be given consideration. There could be adverse effects on the market for Government securities, on Treasury financing operations generally, and on the economy as a whole—and no net gain in reducing consumption—if numerous holders should seek to liquidate existing investments, including E bonds, in order to maintain their spending, while keeping their total of cash and investments (including the refundable tax) unimpaired.

If these objections were surmounted, moreover, there is no certainty that the incentives to work and save would actually be protected by the use of a refundable feature in current taxes levied on individuals. The more remote in time and the less definite the terms of repayment of the compulsory loan, the greater the discount in the taxpayer's mind of the value of the asset he is accumulating in this form. In a defense economy short of all-out war, these difficulties would in all probability be even more important than in wartime. The prospects of a long-pull defense effort would indicate long delay in repayment. If, in addition, the time of repayment were made discretionary, in an effort to avoid post-emergency inflationary complications, the discounting of the value of the loan would be even greater in the taxpayer's mind.

The third range of problems which I indicated in connection with a refundable tax on individuals—namely, the problems which would be faced by the Government at the time of repayment—would hinge very largely on the prevailing economic circumstances at the time. During World War II, one of the main attractions of compulsory lending proposals was thought to be the ready source of purchasing power which would be injected into the economy to cope with the then-expected postwar slump. In the years since World War II, there has been no slump; and this has put the role of compulsory loans in the post-emergency period in a new light. We think of such loans now as having the advantages of being an illiquid accumulation of assets, payment of which could be postponed possibly until the worst inflationary pressures had subsided. To the extent, however, that this feature of the program was made clear—as I have already noted—there would be little gain in incentives and, therefore, little practical advantage, through the use of a compulsory loan program as against out-and-out taxation.

2. Corporations Other Than Financial Institutions

In the case of nonfinancial corporations, the use of a refundable tax might be practicable under emergency circumstances. The excess profits tax in effect during World War II, as already noted, contained such a feature. The specific operation of a refundable tax program applicable to business corporations need not be given detailed discussion at this point, since the problems and difficulties are similar to those already discussed in dealing with refundable taxes on individuals.

3. Banks and Other Financial Institutions

The discussion in the preceding sections of this answer has referred to the tax mechanism as the method by which a compulsory lending program could be put into operation. The reserve requirement mechanism could also be used with respect to financial institutions. In the answer to Questions 35–36, various ways in which the reserve requirement mechanism could be applied to the banks of the country are mentioned. If such a mechanism were applied, compulsory lending would occur incidentally to the extent that the reserve requirements were increased and were required to be invested in Government securities, and banks actually had to add to their holdings on net balance. The advantages and disadvantages of some of these plans are discussed in the answer to Questions 35–36.

In a period of national crisis presumably it would be possible to work out programs involving reserve requirements held in the form of Government securities for other financial institutions as well as for banks. Such procedures were not needed in World War II, however, and any need for them in a future emergency would depend entirely on the particular circumstances involved at the time.

41. Discuss the merits and demerits of the proposal for the issuance of a bond, the value of which would be guaranteed in terms of purchasing power.

Various formulas have been suggested for a Government bond which would be paid off at maturity, or at the end of a stated period of time, in terms of an amount of purchasing power equivalent to the purchasing power of the money originally invested in the security. In its simplest form, the proposal is to tie the principal of the bond to some Government price index. Some of the specific proposals make this operate in both directions—that is, should the price level decline, the bondholder would receive correspondingly less than his original investment upon redemption of the bond. Others provide that if the price level declines, the bond would be paid off at maturity at not less than the purchase price. Two other suggestions are usually included in the proposals for purchasing power bonds: (1) The price level adjustment provision would apply only if the bonds were held for a designated period of time, and (2) each purchaser would be limited in the amount of these securities that he could buy in any one year.

Advantages

1. *Induce Savings.*—Advocates of the purchasing power bond argue that the public is seriously concerned at the present time about the

effect that inflation has upon the purchasing power of savings invested in bonds and other types of fixed-repayment investments. It is argued, moreover, that the Government should do something specific to guarantee the purchasing power of savings since inflation is in part the result of the expanded defense requirements of the Government. It is argued further that a Government bond which would be repayable in a fixed amount of purchasing power, rather than a fixed number of dollars, would be tremendously popular. It is argued also that such a bond would enhance the attractiveness of savings by eliminating the fear of loss of purchasing power which motivates forward buying of consumer goods. Furthermore, such a bond would presumably be more attractive at a time when prices were rising and less attractive when they were falling, thereby providing the Government with a new anti-cyclical control device.

2. *Immobilize Cash Balances.*—In addition to providing an incentive for savings, it is argued that the purchasing power bond might also provide an inducement for the investment of present cash balances in Government securities. It is argued that, sooner or later, these balances might otherwise be transferred to equity holdings or to hoarding commodities, thus accelerating inflationary tendencies. To the extent that a purchasing power bond prevented this, it would have important anti-inflationary tendencies.

3. *Broaden Ownership of the Debt.*—It is also argued that the investment of new savings and cash balances, plus the diversion of some existing liquid assets, could be an important factor in obtaining a further broadening of the ownership of the public debt by individuals.

4. *Protect Small Savers.*—Advocates of the purchasing power bond also argue that a bond of this type would provide more equitable treatment for those with small or moderate incomes because people of small or moderate incomes cannot presently protect themselves against inflation. The Series E savings bond has provided a means of sheltering them from market fluctuations in bond prices. But they are still exposed to the hazard of a loss in the purchasing power of their liquid savings through rises in the prices of goods and services. Wealthier people, on the other hand, can hedge against inflation through the purchase of real estate or stocks or more speculative assets, the prices of which will respond to rises in the general price level.

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To the extent that these advantages would actually materialize, they argue in favor of a bond guaranteed as to purchasing power. There are important qualifications to some of these advantages, however. In addition, I believe that the proposal has such important disadvantages as to make the issuance of a security of this type unwise. These disadvantages are discussed in the paragraphs that follow.

Disadvantages

1. *Protect Only One Sector of the Economy.*—It is argued that one of the most compelling considerations against offering a purchasing power bond is the inequity of selecting one special group of persons in the economy (that is, those who purchase this particular instrument of saving) to protect against inflation. In a free economy, the Gov-

ernment cannot undertake to insure everyone in the country against inflation. Accordingly, it can seriously be questioned whether it is justifiable to single out a particular group of savers for preferential treatment. In the event of inflation, the protection afforded the holders of purchasing power bonds would, of course, be gained at the expense of the public generally, which would have to pay added taxes in order to redeem the purchasing power bonds at higher price levels.

2. *Resistance to Inflation.*—It is also argued that a purchasing power bond would weaken the resistance of a large mass of the population to inflation. In fact, it might even encourage the public to think that a little inflation might not be bad if it resulted in people receiving more dollars for their savings than they had actually invested. Our citizens generally understand the principles and pitfalls of inflation somewhat better than they did a decade or two ago. However, it is certain that many small holders of Government bonds are not familiar with all of the ramifications of an inflationary situation. The most important fact to many of them would be that as a result of inflation they would get back more dollars than they had invested in the first place. It might be extremely difficult for them to be convinced, under these circumstances, of the necessity of supporting anti-inflationary programs.

3. *Government Acceptance of Inflation as Inevitable.*—Another argument against the purchasing power bond is that the very issuance of such a bond would indicate that the Treasury has serious doubts about the ability of the country to control inflationary pressures. It would be dangerous to have this idea become widespread; it might in itself cause further inflation as people rushed to buy goods to protect themselves against further price advances.

4. *Inflation Hedge.*—It is argued further that it is inappropriate for the Government to furnish an investment medium which is in the nature of an inflation hedge. The free enterprise system provides some opportunities for savers and investors to protect themselves against inflation. This requires taking a certain amount of risk, it is true. But that is one of the characteristics of our present economic system. We can't have such a system and a democratic government, and yet expect the Government always to protect people against the loss that might arise from risk taking.

5. *Pay-off Below Issue Price.*—Although the American public may be thinking about inflation at this particular time, it must also be kept in mind that in the event of a deflationary move, holders of a purchasing power security would, according to many of the proposals that have been made, be paid off with less dollars than originally invested. This contingency would probably not be considered by a majority of the people at the time of investment. If it were to occur, there would undoubtedly be many investors who would feel that they had been cheated by their Government. Pressure would certainly be exerted for some form of payment in which no actual dollars were lost in the transaction.

6. *Speculation on the Course of the Price Level.*—It can be argued that the purchasing power bond would encourage speculation on the

part of its holders. They would be tempted to guess when the price level had reached its peak so that they could obtain a maximum number of dollars in return for their investment. On the other hand, at each downward turn in the price level, there might be a rush to liquidate before prices declined further. This particular difficulty could be avoided, of course, by providing that the price level adjustment applies only if bonds are held for a designated period of time. But, this freezing of holders into the issue in itself would be inequitable to certain small savers who may have need of their funds for emergency situations.

7. *Assumption by the Government of Indeterminate Liabilities.*—Another argument advanced against a purchasing power bond is that the Government should not undertake to commit itself to liabilities of an indeterminate amount, since this is against sound financial principles. It has been observed that, in the case of a substantial rise in prices between the issue of such bonds and their maturity, the Government would be paying an extremely large cost for these borrowed funds in comparison with the cost of other borrowing.

8. *Advantages Are Questionable.*—Finally, it is suggested that the basic assumption underlying the case in favor of a stabilized purchasing power bond—that is, that the bond would be popular—is open to question. It is far from certain that the public would actually understand and be interested in a bond of this type, even though it is concerned about inflation. The whole theory of a bond in which a specified number of dollars are invested but an unspecified number of dollars are returned to the investor, is one that is quite unfamiliar to the public—and particularly to persons of small or moderate means to whom it is generally proposed that the Treasury sell this type of bond.

Moreover, it is argued that the problems which people of small or moderate incomes have during periods of price fluctuation would be largely untouched by the issuance of a purchasing power bond. This is because such people generally have only a very small amount of liquid savings. Figures in a recent Federal Reserve survey indicate that 28 percent of American families had no liquid savings at all, and another 22 percent had no more than $300 of liquid savings. The figures are so small that it is clear that as many as half of all American families could not live for more than a very short time on their liquid savings; and a purchasing power bond obviously would be of very limited usefulness to them. There is a broad problem relating to retired people and others living on small fixed incomes, but it does not seem likely that a purchasing power bond would make any significant contribution toward solving it.

Moreover, to the extent that the purchasing power bond caused people to move out of insurance and other forms of savings, it should be recognized that such a development would create real problems for the insurance companies and the banks of the country. This is one of the reasons why the proposals usually suggest low limitations for any one purchaser in any one year. Such limitations would provide time to work out the institutional problems involved.

E. International Comparisons

42. Discuss and evaluate, as far as your available information permits, the relationship between the Executive, the Treasury, and the Central Bank in foreign countries. Place particular emphasis on the resolution of policy conflicts.[6]

The major countries discussed in this survey are parliamentary democracies in which the finance minister or treasury is an integral part of the executive branch of the government and in which the cabinet as a whole is responsible to the legislative branch for all decisions of any of its members. Under these conditions, treasury-central bank and executive-central bank relationships are essentially identical, and the two terms will normally be considered as interchangeable in the paragraphs which follow. Certain exceptions will be mentioned, however, in the course of this answer; for example, legislation in Australia has specifically assigned final responsibility in the field of monetary policy to the executive branch of the government as a unit rather than to the treasury as such. While this distinction appears to make no practical difference in operating relationships, it does reflect increasing appreciation of the vital part which monetary policy plays in the economy as a whole. It is recognized that monetary policy affects not only the financial community but the general level and stability of production, domestic commerce, international trade and the standard of living of the people.

This same growth in economic awareness, coupled with a gradual expansion in economic and social responsibilities of governments, has contributed over the past few decades to substantial changes in the relationship between the executive and the central bank in all areas of the world. In many countries the government has assumed financial ownership of the central bank with or without assuming complete control of its policies and operations. In these and other countries the position of the central bank vis-à-vis the treasury has been formalized and clarified by new legislation. In certain countries this new legislation reflects a desire to preserve a distinction between the respective fields of primary responsibility assigned to the executive and the central bank; in such instances the possibility of policy disagreement has generally been recognized and formal procedures for resolving such policy conflicts have been provided.

These changes in treasury-central bank relationships reflect the political, economic and social developments of the last half century and are not solely a consequence of World War II. Autonomy for central banks was the commonly accepted feature of the nineteenth century. In that period, adjustments of the monetary supply, other than those resulting directly from changes in monetary reserves, were brought about primarily through changes in the cost and availability of bank credit. The objective was to insure that the nation's gold stock was maintained at a level adequate to meet potential fluctuations in the balance of payments and to provide such statutory backing for the currency as might be required. Operations of the central bank, while requiring skill and judgment in regard to timing and extent,

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[6] The answer to this question was prepared on the basis of information available in November 1951.

were viewed as being determined by impersonal market forces of world-wide scope; and few persons questioned the necessity of a more or less automatic adjustment thereto. The single concrete objective of monetary policy was thus a matter of common agreement. The economic conditions calling for corrective action were believed to be readily ascertainable by observation of movements in the gold reserves.

This acceptance of more or less automatic adjustment to changes in the level of reserves began to be seriously questioned after the first World War. This re-examination was primarily a result of the severe deflationary developments in the United Kingdom when that country attempted to return to the gold standard in 1925 at a sterling rate subsequently recognized as unduly high. By the early 1930's, adherence to the nineteenth century gold standard rules had been greatly weakened. In the early years of the depression, country after country cut its traditional rigid ties with gold and sought an independent monetary course deemed most appropriate for the welfare of its people. In the search for policies to assist recovery from the depression, modern society became more keenly aware of the impact of government fiscal and monetary policies upon the operations of the entire economy. Monetary policy became a subject for both economic and political controversy; and there was a growing recognition that such policy must, in the final analysis, be determined by agencies politically responsible to the nation as a whole.

The deficit financing of the depression years and, more importantly, the enormous requirements of war and postwar finance have also brought about a radical change in technical aspects of the money market and the credit structure. Government debt has become in many countries a much more important component of the total debt structure and hence of the aggregate assets of the banking system. Changes in the size, composition and ownership of government debt are now an essential determinant of monetary conditions in some countries. The need for coordinating the debt management operations of national treasuries and the policies of central banks in the field of private credit has become increasingly pressing in such countries. Existing relationships between the executive and the central bank in many areas of the world thus reflect the influence of a long period of economic, political and social change.

1. Central Bank Ownership

In the shifting treasury-central bank relationships, transfers of central bank ownership to the government appear as spectacular events. But these transfers did not necessarily constitute drastic changes in the relationship between the institutions involved; in certain cases, they merely symbolized formal acceptance of executive responsibility which had been exercised previously. In the early 1930's, government-owned central banks existed in only 10 countries.[7] Between 1931 and 1939, four banks were nationalized (that is, converted to full government ownership),[8] while one new bank was established as a government-owned institution.[9] Between 1939 and 1945, four banks were established as government-owned institutions.[10] After the

[7] The central banks of Bulgaria, Finland, Iceland, Sweden, the USSR, Nicaragua, Uruguay, China, Iran, and Australia.
[8] The central banks of Denmark, New Zealand, Canada, and Bolivia.
[9] The central bank of Costa Rica.
[10] The central banks of Afghanistan, Ireland, Thailand, and Paraguay.

war, 10 central banks were nationalized,[11] and almost all central banks created in recent years have been established as government-owned institutions.[12] The recent wave of central bank nationalizations reflected in part postwar political developments in various countries, and in part changed institutional and monetary conditions vitally affecting the banking system.

Of the 75 central banks listed in Exhibit B (p. 351), 49 are entirely government-owned. By far the largest number of government-owned central banks are in Europe; but even in the Americas more than half of the central banks are owned by their respective governments.

Of the remaining central banks that are not entirely government-owned, about one-half are partially owned by the government; while the remainder continue to be owned entirely by private stockholders. Varying proportions of the capital of partially government-owned banks are owned by commercial and other banks and/or the general public.[13] There remains a small number of central banks whose capital continues to be held entirely by private stockholders.[14] Insofar as the capital of central banks is held either partially or entirely by commercial banks, such ownership frequently represents merely a financial contribution from the banking system, and carries few if any of the prerogatives of control implied by equity ownership. Even where the central bank is not owned even in part by the government, it is generally controlled by a management appointed by the government. With the universal recognition of the essentially public character of central banking, private ownership of the central banks, whether partial or complete, is a formality without corresponding powers and obligations. The form of ownership reflects the historical development of central banking mechanisms as affected by specific political, economic, and social changes in the countries concerned.

2. The Relations between the Treasury and the Central Bank

The growing recognition of the essentially public character of central banking can be traced even more clearly by reviewing the world-wide trend toward statutory formalization of what had previously been informal consultation and cooperation between the treasury and the central bank. Up to the early 1930's the central bank statutes either were silent on the general position of the central bank vis-à-vis the treasury or contained limited provisions for government participation in constituting the bank's governing body, for example, by appointing the governor, approving the election of the directors by shareholders, or nominating a government commissioner. The central bank that seemed in those years most independent of any form of *legal* control, except in regard to its powers of issuing bank notes and granting loans to the state, was the Bank of England. An exception to the generalization stated above was the Swedish Riksbank, which operated

[11] In chronological order, the central banks of France, England, Argentina, Rumania, Yugoslavia, Hungary, Czechoslovakia, India, the Netherlands and Norway. In Indonesia a bill providing for nationalization is pending in Parliament.

[12] The central banks of Albania, Poland, Guatemala, Dominican Republic, the Philippine Requblic, Iraq, Ceylon, Burma, Eastern Germany, Western Germany (for details, see Appendix A), China (Communist), Honduras, and Republic of Korea. The only exceptions are the central banks of Venezuela, Pakistan, Cuba, and the Belgian Congo.

[13] The central banks of Belgium, Portugal, Turkey, Chile, Colombia, Ecuador, Mexico, Venezuela, Pakistan, Japan, Cuba, and the Belgian Congo.

[14] Such "private" central banks are those of Egypt, Greece, Israel, Italy, Spain, Switzerland (the National Bank of Switzerland is largely owned by the Swiss cantons, and by the cantonal banks which in turn are owned by the cantons), Peru, Salvador, and the Union of South Africa.

under the guarantee and the supervision of the Swedish Parliament, and because of this special position was unique among central banks.

The first departure from the traditional lack of formalization of treasury-central bank relationship seems to have been a New Zealand law of 1936 [15] decreeing that the general function of the reserve bank, within the limits of its powers, was to give effect as far as might be to the monetary policy of the government, as communicated to it from time to time by the Minister of Finance. More specifically, the reserve bank was required to give consideration to any representations by the Minister of Finance and to give effect to any decisions of the government conveyed to the bank in writing by the Minister of Finance. This last provision, however, was repealed in 1950; and new legislation provides that the reserve bank is to give effect to any resolution of the House of Representatives that may be communicated to it regarding its functions and business.

Before the war, greater formalization of treasury-central bank relationships was noticeable only in isolated instances such as that just described. In the early 1930's, the central banks increasingly sought guidance from the treasury, but consultation and cooperation were entirely informal. Nor did the governments have to resort to formal legislation during the war itself since central banks everywhere responded fully to the exigencies of war finance. It was only after the war that the trend toward greater formalization of the treasury-central bank relationship became greatly accentuated.

In Great Britain informal cooperation between the Treasury and the central bank had long existed and such cooperation had become increasingly close following the departure of Britain from gold in 1931. Under the Bank of England Act of 1946, "The Treasury may from time to time give such directions to the Bank as, after consultation with the Governor of the Bank, they think necessary in the public interest." This statutory provision is highly formal; but much, of course, depends on its interpretation and application. In a speech in the House of Lords, in 1946, the Governor of the Bank stated that the qualifying clause "after consultation with the Governor of the Bank" was inserted at his request and received cordial agreement from the Treasury. So far as is known, no conflict of views has required the Treasury to exercise its authority to give direction to the Bank.

Very similar legislation was passed in India in 1948, but again there is no evidence that the Indian Government has exercised its power to give formal directions to the Reserve Bank of India.

In Australia, under legislation of 1945, the Commonwealth Bank was required from time to time to inform the Treasurer of its monetary and banking policy. In the event of any difference of opinion as to whether that policy was directed to the greatest advantage of the people of Australia, a procedure was provided in the law to enable the Bank and the government to reach agreement or otherwise resolve the conflict. This procedure will be examined later, but it may be mentioned here that the 1945 legislation was revised in 1951 to provide that the Bank is now required to give information regarding its policies, not specifically to the Treasurer, but to the government as a whole. The procedure for settling possible disputes has also been considerably changed.

[15] For relevant excerpts from central bank legislations in selected countries, see Exhibit C (p. 355).

Similar changes have occurred in the Netherlands. Temporary arrangements were made in 1945 to restore the Nederlandsche Bank to its position under the Banking Act of 1937, which had been abrogated by the German occupation authorities. Under this legislation, the Minister of Finance was given power to issue directions to the management of the Nederlandsche Bank whenever he deemed such a course necessary in order to coordinate the monetary and financial policy of the government and the policy of the Nederlandsche Bank. The Nederlandsche Bank is required to follow such directions; but, under a new law enacted in 1948, the management of the Bank can appeal to the Crown from the instructions of the Minister of Finance.

In Spain a number of essentially central bank functions, such as fixing the discount rate, engaging in open market operations, and directing credit policy, were taken from the Bank of Spain in 1947. These activities were thereafter to be performed by the Minister of Finance with the approval of the council of ministers. There is also a broad clause in the new law empowering the Minister of Finance to determine monetary policy in general.

It is clear, therefore, that the substitution of formal statutory authority for custom, tradition and informal cooperation represents a fundamental change in treasury-central bank relationships. Yet the new statutes, for the most part, simply formalized the actual relationship of the central bank vis-a-vis the treasury as this had emerged in the 1930's, after the development of the "managed" gold standard, and as it had been further developed during the war period.

On the whole, the central banks readily accepted the formalization of their recent position vis-a-vis the government. In most countries the implementation of the new status was not accompanied by any changes in the leading central bank personnel. In England, France, Australia, and the Netherlands, the same governors and other high officers continued to serve after the implementation of the new statutes.

3. The Resolution of Policy Conflicts

While the essentially public character of central banking has thus been formalized in statutory provisions, recent legislation frequently has recognized an important role for the central bank in the formulation and execution of monetary and credit policy. Many countries with fully formalized treasury-central bank relationships have enacted statutory provisions for resolving differences between the treasury and central bank. In other countries, avoidance of differences is sought by placing responsibility for major policy decisions with bodies on which the treasury and the central bank are represented with some degree of equality. In actual practice, of course, coordination of policies depends not only on statutory provisions, but also on custom, tradition, and the personalities involved.

The legal procedure developed in Australia for resolving possible conflicts on monetary policy is a particularly complete one. Legislation passed in 1945 provided that if the Treasurer and the Commonwealth Bank failed to reach agreement, the Treasurer should inform the Bank that the government accepted responsibility for the adoption by the Bank of the policy laid down by the government; and the Bank was then required to give effect to that policy. Later new legislation adopted in 1951 changed the procedure somewhat. The board of the Bank is now required to furnish the Treasurer with a statement of its views regarding the question at issue. The Treasurer may then submit his recommendation to the Governor General of Australia. The Governor General, acting with the advice of the Federal Executive Council (which is practically identical in composition with the government, since all cabinet ministers are ex-officio members), may lay down the policy that is to be adopted by the Bank. The Treasurer is to inform the Bank of this policy, and also of the government's acceptance of responsibility for its adoption. The legislative branch is then to be fully informed of the issues involved. A copy of the Governor General's order laying down the disputed policy, a statement by the government regarding its position, and the Bank board's statement previously furnished to the Treasurer, are all to be presented by the Treasurer to each House of Parliament for such further consideration as those bodies may deem necessary.

In New Zealand, under the 1950 legislation as already noted, the House of Representatives may communicate to the central bank resolutions regarding its functions and business. This may be regarded as a way of resolving policy conflicts between the treasury and the central bank. In the Netherlands, on the other hand, the central bank has the right, under the 1948 legislation, to appeal to the Crown from directions given by the Minister of Finance.

By contrast, the central bank legislation of Canada does not spell out in any detail the relationship between the government-owned Bank of Canada and the Canadian Government. Members of the Board of Directors of the Bank are appointed by the Government and the Board in turn, with the approval of the Government, selects a Governor, Deputy Governor and Assistant Deputy Governor. An Executive Committee, composed of the Governor of the Bank, the Deputy Governor and one director selected by the Board, meets weekly and exercises the same powers as the Board of Directors, but submits all its decisions for Board review. The legislation makes no provision for the Minister of Finance to give positive direction to the Bank's policy, other than that implicit in his representation on the Executive Committee. There is, however, a provision regarding the Government's right of review in any instance in which the Governor, or in his absence, the Deputy Governor, exercises his veto over any action or decision of the Board of Directors or of the Executive Committee. The Minister of Finance must be informed in writing of the circumstances surrounding the veto; he in turn submits this information to the Government for confirmation or disallowance.

In Western Germany the central bank established after the war was subject to such directions as might be issued by the Allied Bank Commission; on the other hand, the influence on the central bank of such German Government authorities as existed at the time was severely restricted by the bank's statutes. Under recent temporary legislation the ministers of finance and economy are nonvoting members of the central bank board, and the central bank is obliged to give consideration and support to government policy within the framework of its own duties. In cases of conflict, the government can demand an 8-day suspension of central bank decisions.

In Belgium, the government exercises control over the central bank's operations through a government commissioner who attends the bank's board meetings, without vote, but with a right of veto in case a board's decision is considered as contrary to government policy. In practice, any policy conflict that may arise has been resolved by informal discussions. The preamble to the 1948 bill that provided for a revision of the statutes of the National Bank of Belgium stated that it was considered essential that the central bank should remain distinct from the executive power if its interventions were to be made with the elasticity indispensable for the growth of the national economy; and that the government should exercise its prerogatives in such a way as to safeguard the Bank's independence and liberty of action, to the extent that their sacrifice is not required in the social interest.

A great variety of statutory provisions govern treasury-central bank relationships in Latin America. In Bolivia, Colombia, and Mexico, the central bank has to refer specified policy measures to the Minister of Finance for approval or prior review. In the Dominican Republic and Honduras, on the other hand, the central bank has the authority, explicitly conferred by statute, to make final decisions in the field of monetary policy. It is not known, however, whether any conflicts have arisen that have made it necessary for the central bank to assume sole responsibility for its policy. In Costa Rica, the legislation requires other government institutions to cooperate with the central bank in implementing its policy. In several Latin American countries, the Minister of Finance is a member of the board of directors of the central bank. In Cuba, under the central bank law of 1948, the board of directors of the central bank consists of five voting members; in addition, the Minister of Finance is an ex-officio member but is expressly denied the right to vote.

In some countries that are in a process of rapid economic development, the powers and functions traditionally associated with the central bank are actually exercised by a monetary board which includes, in addition to other members, both the highest officer of the central bank and the Minister of Finance. For instance, in Guatemala and Paraguay the president of the monetary board is governor of the central bank.

In Japan, under the new legislation adopted in 1949, the policy board of the Bank of Japan includes, as voting members, the Governor of the Bank and four members appointed by the government with the approval of the legislature, while representatives of the Ministry of Finance and of the Economic Stabilization Board are nonvoting members. Similarly, in Egypt, under legislation enacted in 1950, matters of monetary, credit, and exchange policy are decided by a supreme committee of seven members, four representing the Egyptian Government and including the Minister of Finance as chairman, and three representing the central bank. In the Philippines, the directing board of the central bank consists of the Secretary of Finance, as chairman, the Governor of the central bank, the President of the Philippine National Bank (a government-owned commercial bank), the Chairman of the Board of the Rehabilitation Finance Corporation, and three appointed members.

In Argentina, the central bank, which under its constituent law of 1935 had enjoyed complete independence for the exercise of its functions, passed in 1949 under the direct control of the Ministry of Finance. It is now governed by a directorate composed of the Minister of Finance, acting as President of the bank, the Under Secretary of the Finance Ministry, and nine directors who are either the presidents of nationalized commercial, industrial, mortgage, or savings banks, or are government appointees representing agriculture, stockbreeding, commerce, and labor.

In a few countries the formulation of monetary and credit policy is entrusted to a national council that includes, among others, both the minister of finance and the governor of the central bank. In France the National Credit Council was established in 1945 by the same law that nationalized the central bank and the four largest commercial banks. It is presided over by the Minister of Finance, with the Governor of the Bank of France acting as vice president ex-officio. In addition, there are 38 members representing various government departments, public and private financial institutions, business, agriculture, labor, and the consumer. The Council's functions are purely advisory; nevertheless, it seems to have exercised a considerable influence in the formulation of French monetary and credit policy.

In Italy, on the other hand, the Inter-ministerial Credit Committee set up in 1947 has full authority to determine policy. It consists of the Minister of the Treasury, as chairman, and of the Ministers of Finance, Agriculture, Industry, and Foreign Trade. The Governor of the Bank of Italy, although not a formal member, attends the sessions of the Committee. The role of the Bank is somewhat greater than the composition of the Committee would suggest since the Bank is charged not only with technical responsibility for carrying out the broad decisions of the Committee, but also with presenting to the Committee reports and studies of those problems which are within the group's competence. The Committee's responsibilities cover not only broad problems of monetary policy but also purely banking matters.

4. Conclusion

This review of relationships between the executive and the central bank in foreign countries suggests that the ultimate responsibility for determining over-all economic policies has increasingly been granted to public officials who are politically responsible to the electorate. Except in countries where more or less complete power to direct all aspects of the economy has been concentrated in government hands, the tendency appears to be to leave with the central bank a definite measure of responsibility for influencing monetary conditions within the broad framework of economic policy determined by the government as a whole.

In the attempt to establish a smoothly functioning relationship between the central bank and the financial officers of the government, legislation of considerable variety has been devised. This legislation has depended upon varying concepts of the relationship appropriate to particular national conditions, as such concepts have developed in countries in different stages of economic growth and with various social and political backgrounds.

EXHIBIT B.—*Capital and ownership of foreign central banks*

[In thousands of currency units]

Country	Bank	Currency unit	Capital		Ownership of paid-up capital				Data as of
			Authorized	Paid up	Government owned	Privately owned			
						Total	Banks	Other	
Afghanistan	Da Afghanistan Bank	Afghani	120,000	120,000	[1] 120,000	[1] 0	[1] 0	[1] 0	1949
Albania	Albanian State Bank	Lek	?	?	?	0	0	0	?
Algeria and Tunisia	Banque de l'Algerie et de la Tunisie	Algerian franc	25,000	25,000	[2] 25,000	0	0	0	1951
Argentina	Banco Central de la Republica Argentina	Peso	100.000	100,000	100.000	0	0	0	1951
Australia	Commonwealth Bank of Australia	Australian pound	20,000	4,000	4,000	0	0	0	1951
Austria	Oesterreichische National Bank	Schilling	([3])	([3])	([3])	0	0	0	([3])
Belgian Congo and Ruanda-Urundi.	Banque Centrale du Congo Belge et du Ruanda-Urundi.	Congo franc	150,000	[4] 150,000	[4] 90.000	[4] 60,000	[4] 30,000	[4] 30,000	[4] 1951
Belgium	Banque Nationale de Belgique	Belgian franc	400,000	400,000	200,000	200,000	?	?	1951
Bolivia	Banco Central de Bolivia	Boliviano	200,000	50,000	50,000	0	0	0	1951
Brazil	Banco do Brasil [5]	Cruzeiro	200,000	100,000	55,732	44,268	366	43,902	1951
Bulgaria	Bulgarska Narodna Banka	Lev	([6])	?	?	0	0	0	([6])
Burma	Union Bank of Burma	Rupee	10,000	10,000	10,000	0	0	0	1951
Canada	Bank of Canada	Canadian dollar	5,000	5,000	5,000	0	0	0	1951
Ceylon	Central Bank of Ceylon	Rupee	15,000	15,000	15,000	0	0	0	1951
Chile	Banco Central de Chile	Peso	150,000	119,377	20,000	99,377	92,756	6,621	1951
China (Formosa)	Central Bank of China [7]	New Taiwan dollar	?	?	?	0	0	0	1951
China (Communist)	People's Bank of China	People's dollar	?	?	?	0	0	0	[8] 1949
Colombia	Banco de la Republica	Peso	([9])	11.736	5,000	6,736	3,658	3.078	1951
Costa Rica	Banco Central de Costa Rica	Colon	3.000	3,000	3,000	0	0	0	1951
Cuba	Banco Nacional de Cuba	Peso	10,000	5,000	2,500.1	2,499.9	2,499.9	0	1951
Curaçao	Curacaosche Bank	Curacaosche Florin	450	450	450	0	0	0	1951
Czechoslovakia	Statni Banka Ceskoslovenska	Koruna	3,000,000	3,000,000	3,000,000	0	0	0	1950
Denmark	Danmarks National Bank	Krone	50,000	50,000	50,000	0	0	0	1951
Dominican Republic	Banco Central de la Republica Dominicana	Peso	100	100	100	0	0	0	1951
Ecuador	Banco Central del Ecuador	Sucre	20,000	14,769	2,078	12,691	12,691	0	1951
Egypt	National Bank of Egypt	Egyptian Pound	3,000	3,000	0	3,000	?	?	1951
Ethiopia	State Bank of Ethiopia	Ethiopian Dollar	2,000	2,000	2,000	0	0	0	1950
Finland	Finlands Bank	Markka	5,000,000	5,000.000	5,000,000	0	0	0	1951
France	Banque de France	Franc	182,500	182,500	182,500	0	0	0	1951
French West Africa	Banque de l'Afrique Occidentale	Franc	50,630	50,630	0	[10] 50,630	?	?	1951
Germany (Western)	Bank Deutscher Laender	Deutsche Mark	100,000	100,000	([11])	([11])	([11])	([11])	1951
Germany (Eastern)	Deutsche Notenbank	Deutsche Mark	100,000	100,000	[12] 100,000	0	0	0	1948

Greece	Banque de Grece	Drachma	60,000,000	60,000,000	[13] 0	[13] 60,000,000	?	?	1951
Guatemala	Banco de Guatemala	Quetzal	([14])	500	500	0	0	0	1951
Haiti	Banque Nationale de la Republique d'Haiti	Gourde	5,000	5,000	5,000	0	0	0	1951
Honduras	Banco Central de Honduras	Lempira	500	500	500	0	0	0	1951
Hungary	Magyar Nemzeti Bank	Pengo [15]	([15])	?	?	?	?	?	([15])
Iceland	Landsbanki Islands	Krona	([16])	4,800	4,800	0	0	0	1951
India	Reserve Bank of India	Rupee	50,000	50,000	50,000	0	0	0	1951
Indonesia	De Javasche Bank	Rupiah	9,000	9,000	([17])	([17])	([17])	([17])	1951
Iran	Bank Melli Iran	Rial	300,000	300,000	300,000	0	0	0	1951
Iraq	National Bank of Iraq	Iraqi Dinar	5,000	2,500	2,500	0	0	0	1951
Ireland	Central Bank of Ireland	Irish pound	40	24	24	0	0	0	1950
Israel	Bank Leumi le-Israel	Israeli pound	3,000	1,200	0	1,200	0	1,200	1951
Italy	Banca d'Italia	Lira	300,000	300,000	0	[18] 300,000	[18] 253,500	[18] 46,500	1950
Japan	Nippon Ginko	Yen	100,000	100,000	([19])	?	?	?	1951
Korea (south)	Bank of Korea	Won	1,500,000	1,500,000	1,500,000	0	0	0	1950
Lebanon. (See Syria.)									
Madagascar	Banque de Madagascar et des Comores	French franc	111,000	37,000	([20])	([20])	([20])	([20])	1950
Mexico	Banco de Mexico	Peso	50,000	50,000	[21] 25,500	[21] 24,500	([21])	([21])	1951
Morocco	Banque d'Etat du Maroc	Moroccan franc	46,200	46,200	0	46,200	([22])	([22])	1949
Netherlands	De Nederlandsche Bank	Guilder	20,000	20,000	20,000	0	0	0	1951
New Zealand	Reserve Bank of New Zealand	New Zealand pound	[23] 1,500	[23] 1,500	[23] 1,500	0	0	0	1951
Nicaragua	Banco Nacional de Nicaragua	Cordoba	2,500	2,500	2,500	0	0	0	1950
Norway	Norges Bank	Krone	35,000	35,000	35,000	0	0	0	1951
Pakistan	State Bank of Pakistan	Rupee	3,000	3,000	1,530	1,470	?	?	1950
Paraguay	Banco del Paraguay	Guarani	([24])	[24] 23,000	[24] 23,000	0	0	0	1951
Peru	Banco Central de Reserva del Peru	Sol	10,000	4,015	0	4,015	1,626	2,389	1950
Philippine Republic	Central Bank of the Philippines	Peso	10,000	10,000	10,000	0	0	0	1950
Poland	Narodowy Bank Polski	Zloty	?	250,000	250,000	0	0	0	[25] 1946
Portugal	Banco de Portugal	Escudo	100,000	100,000	296	99,704	12,388	[26] 87,316	1950
Rumania	Bank of the Rumanian People's Republic, State Bank.	Leu	2,000,000	2,000,000	2,000,000	0	0	0	1948
Salvador, El	Banco Central de Reserva de El Salvador	Colon	1,800	1,800	0	1,800	750	1,050	1951
Spain	Banco de Espana	Peseta	177,000	177,000	0	177,000	?	?	1950
Surinam	De Surinaamsche Bank	Surinam Florin	1,000	1,000	0	1,000	?	?	1949
Sweden	Sveriges Riksbank	Krona	50,000	50,000	50,000	0	0	0	1951
Switzerland	Banque Nationale Suisse	Swiss Franc	50,000	25,000	[27] 9,635	15,365	[27] 4,074	11,291	1950
Syria and Lebanon	Banque de Syrie et du Liban	French Franc	300,000	300,000	0	300,000	?	?	1949
Thailand	Bank of Thailand	Baht	20,000	20,000	20,000	0	0	0	1950
Tunisia. (See Algeria.)									
Turkey	Banque Centrale de la Republique de Turquie	Turkish Pound	15,000	10,500	[28] 2,570	7,930	[28] 4,676	3,254	1949
U. S. S. R	Gosbank	Ruble	([29])	([29])	([29])	0	0	0	([29])
Union of South Africa	South African Reserve Bank	South African Pound	1,000	1,000	0	1,000	?	?	1951
United Kingdom	Bank of England	Pound Sterling	14,553	14,553	14,553	0	0	0	1951

See footnotes at end of table.

EXHIBIT B.—*Capital and ownership of foreign central banks*—Continued

[In thousands of currency units]

Country	Bank	Currency unit	Capital		Ownership of paid-up capital				Data as of
			Authorized	Paid up	Government owned	Privately owned			
						Total	Banks	Other	
Uruguay	Banco de la Republica Oriental del Uruguay	Peso	70,000	70,000	70,000	0	0	0	1950
Venezuela	Banco Central de Venezuela	Bolivar	10,000	5,000	[30] 5,000	[30] 0	0	0	1951
Yugoslavia	Banque Nationale de la Republique Federative Populaire de Yugoslavie.	Dinar	([31])	([31])	([31])	([31])	([31])	([31])	([31])

[1] Probable distribution only. The law, however, provides that the Government is to subscribe to at least 75 percent of the shares and has preference in purchasing the remaining 25 percent.

[2] Half of the shares are owned by the French Government, ⅓ by the Algerian Government, and ⅙ by the Tunisian Government.

[3] No complete balance sheet has been issued since the war; amount of capitalization not available.

[4] Since the bank is currently in the process of being organized, the amount of capital paid up is not known at this time. By June 1952, however, it will be all subscribed in the manner shown. Of the government-owned shares, 75,000 are owned by the Congo Government and 15,000 by the Vice Government of Ruanda-Urundi. The bank-owned shares are owned by the National Bank of Belgium.

[5] This is not a central bank, but through its administration of the Government's Rediscount Department and its handling of the Government's deposits, it has fulfilled certain central bank functions. Moreover, it acts as fiscal agent for the Government abroad.

[6] Art. 11 of the bank law of Dec. 23, 1947, provides that "The capital of the Bulgarian National Bank is unlimited. The bank can create, on the decision of the Council of Ministers funds according to its needs." We have no further information.

[7] The Central Bank of China was transferred in 1949 to Formosa, where it now functions as a central bank. It is custodian of the island's gold, and is administrator of all foreign exchange funds. However, it does not issue currency, this function having been assumed by the Bank of Taiwan, a provincial bank.

[8] Organized in 1949 as a wholly Government-owned bank. No further details available.

[9] The power of increasing the authorized capital from the original 10 million pesos to provide shares for new or old member banks has apparently been used.

[10] Owned and controlled by persons and institutions in France.

[11] The capital of the Bank Deutscher Laender is owned by the land central banks, the capital of which, in turn, is owned by the respective land governments.

[12] 55 million of bank's capital is owned by the Finance and other Ministries of the central Government: 45 million by the various state banks, which are owned by the state governments.

[13] The "state" and "state undertakings" are authorized to hold up to ⅒ of total capital, but no information is available to indicate that the government holds any shares.

[14] Art. 8-10 of the new central bank law states that "the bank shall be established with an initial guarantee fund of 500,000 quetzales, which shall be contributed by the state." This guarantee fund is to be augmented by the annual net profits "until this fund reaches a sum equivalent to 10 percent of the total assets of the bank, provided that this percentage exceeds 500,000 quetzales." For this calculation, international reserves are to be subtracted from total assets.

[15] As of January 1946. A new currency unit, the "forint", was introduced in August 1946 to replace the pengo, but no data are available as to the bank's capitalization under the new currency. The 1948 bank law provided for capital of "30 million gold crowns"; on Dec. 31, 1949, the bank's statement indicated that 30 million gold crowns were valued at "120,823,162 florins." Some shares apparently can be privately owned.

[16] Treasury authorized to increase capital as necessary.

[17] Bank is in process of being nationalized. All private capital stock (denominated in Dutch guilders) is being purchased by the Indonesian Government.

[18] The national government and the municipal or provincial authorities hold part or all of the shares of many of the institutions classed as "banks." "Other" is comprised of insurance companies and institutions, most of which are privately owned.

[19] Majority ownership by Government is specified by banking law, but exact proportion is not known.
[20] Total paid-up capital as of September 1950. Paid-up capital is eventually to be raised to 111,000, the French Government owning a clear but unspecified majority.
[21] Obligatory government ownership of 51 percent of capital. About ⅓ of privately owned capital is held by banks controlled or partially owned by Government. Most of remaining privately held shares are in hands of other banks.
[22] As of November 1945, French and Moroccan banks reportedly held 57 percent of the bank's capital stock. The balance was probably all held by banks in other countries.
[23] No shares issued. A "general reserve fund" provided by the Government constitutes the capital.
[24] Initial capitalization of 6,000,000 guaranies has been subject to periodic increases of unreported amounts by transfers from surplus funds of bank. Amounts shown are approximate only.
[25] The banking reform of Oct. 25, 1948, and amendments to it in March 1951 do not mention the capitalization of the bank. On Oct. 28, 1950, a monetary reform revalued most old accounts at the rate of 100 old zlotys to 3 new zlotys. It is not known if, or how, this affected the Government's capital.
[26] Bearer shares, amounting to 47,696,000 escudos, are regarded as being owned by "other."
[27] Cantons and cantonal banks together own 54.8 percent of the shares. ("Government" comprises cantons and demicantons only. "Banks" comprise cantonal banks only. Other banks, the extent of whose holdings is not known. are included under "Other.")
[28] State may hold no more than 25 percent of shares, and foreign banks may hold no more than 10 percent.
[29] Capital appears to have been raised (perhaps several times) since 1933. The 1937 capital and reserves were nearly 2.9 billion rubles.
[30] Government must hold minimum of 50 percent of the shares. Remaining 50 percent may be subscribed to by banks and public. After a certain date unsubscribed part must be taken up by Government. It is probable that the paid-up capital is entirely Government-owned.
[31] No information.

EXHIBIT C

EXCERPTS FROM MONETARY LEGISLATION OF SELECTED COUNTRIES REGARDING CENTRAL BANK CAPITAL AND MANAGEMENT, AND TREASURY—CENTRAL BANK RELATIONSHIPS

(GENERAL NOTE: Where original charters, decrees, etc., are not in the English language the excerpts represent unofficial translations only.)

ARGENTINA

Organic Charter of the Central Bank of the Republic of Argentina and Banking Law (Decree No. 8.503/46 of March 25, 1946, and Decree No. 25.120 of October 8, 1949)

Constitution

ART. 1. The Central Bank of the Argentine Republic is an independent entity subordinate to the Minister of Finance . . .

The state guarantees the liabilities of the Bank. [1949]

Capital

ART. 1. As of the date of the present Decree, the Banco Central de la Republica Argentina is nationalized . . . [1949]

ART. 2. The capital of the Banco Central . . . is declared national property . . . [1946]

ART. 4. The capital of the Bank shall be 100 million pesos. [1949]

Management

ART. 5. The Bank shall be governed by a directorate composed of a president, a vice-president and nine directors . . . [1949]

ART. 6. The Minister of Finance and the Under-secretary of Finance shall be president and vice-president of the Bank, respectively. [1949]

ART. 8. The following shall be directors of the Bank by virtue of their position:
the president of the Bancos de la Nacion Argentina
the president of the Crédito Industrial Argentino
the president of the Hipotecario Nacional, and
the president of the Caja Nacional de Ahorro Postal.

The five other directors are appointed by the government in conformity with the following manner of representation: one each for agriculture, the cattle industry, industry, commerce, and labor. [1949]

ART. 9. The five directors appointed by the government shall hold office for four-year terms and are eligible for reappointment . . .

The following shall not be directors

(a) members of the national, provincial, and municipal legislatures . . . [1949]

ART. 11. The president, representing the directors, shall exercise control over the Bank, and shall deal with, and decide, all those questions which are not expressly reserved for the decision of the directors . . . The president shall name, promote and suspend . . . employees, giving notice of his actions to the directors. [1949]

ART. 12. The president shall call the meetings of the board of directors . . . Six members shall form a quorum and, unless otherwise specified, resolution shall be adopted by a simple majority of the attending members. In case of a tie vote the president's vote, or the vote of the person presiding, shall count twice. [1949]

AUSTRALIA

The Commonwealth Bank Act 1951 (assented to July 6, 1951)

Management

23.–(1) the Commonwealth Bank Board shall consist of

(a) the Governor
(b) the Deputy Governor
(c) The Secretary to the Department of the Treasury, and
(d) seven other members, who shall be appointed by the Governor-General . . .

31.–(1) the Governor and the Deputy Governor shall be appointed by the Governor-General . . .

23.–(2) of the seven members appointed under 1 (d) . . . at least five shall be persons who are not officers of the Bank or of the Public Service of the Commonwealth.

29. The Governor shall be chairman of the Board and the Deputy Governor shall be Deputy Chairman of the Board.

Relations with the Government

9A.–(1) The Bank shall, from time to time, inform the Government of the monetary and banking policy of the Bank.

(2) In the event of a difference of opinion between the Government and the Bank as to whether the monetary and banking policy of the Bank is directed to the greatest advantage of the people of Australia, the Treasurer and the Board shall endeavour to reach agreement.

(3) If the Treasurer and the Board are unable to reach agreement, the Board shall forthwith furnish to the Treasurer a statement in relation to the matter in respect of which the difference of opinion has arisen.

(4) The Treasurer may then submit a recommendation to the Governor-General, and the Governor-General, acting with the advice of the Federal Executive Council, may, by order, determine the policy to be adopted by the Bank.

(5) The Treasurer shall inform the Bank of the policy so determined and shall at the same time inform the Bank that the Government accepts responsibility for the adoption by the Bank of that policy and will take such action (if any) within its powers as the Government considers to be necessary by reason of the adoption of that policy.

(6) The Bank shall thereupon give effect to the policy determined by the order and shall, if the order so requires, continue to give effect to that policy while the order remains in operation.

(7) The Treasurer shall cause to be laid before each House of the Parliament, within fifteen sitting days of that House after the Treasurer has informed the Bank of the policy determined under sub-section (4) of this section—

(a) a copy of the order determining the policy;

(b) a statement by the Government in relation to the matter in respect of which the difference of opinion rose; and

(c) a copy of the statement furnished to the Treasurer by the Board under sub-section (3) of this section.

BELGIUM

Law No. 29 of August 24, 1939 and law of July 28, 1948 on the Belgian National Bank

Capital

ART. 5. The capital stock of the bank consists of four hundred million francs, divided into four hundred thousand shares . . .

Two hundred thousand shares are subscribed to by the State at their full nominal value . . . [1948]

Management

ART. 22. The Bank is managed by a Governor and administered by a Board of Directors assisted by a Board of Management. It is supervised by an Audit Committee. In addition, there is a General Council. [1939]

ART. 23. The Board of Directors is presided over by the Governor [1939] and includes, in addition to him, at least three but not more than six directors . . . [1948]

The Board of Management is composed of the Governor, the directors [1939] and ten managers. [1948]

The General Council is to be composed of the Governor, the directors, the managers and the auditors . . . [1939]

ART. 24. The Governor is appointed by the King for a term of five years. [1939] The Directors are appointed by the King, following nomination by the Board of Management, for a term of six years. [1948]

The managers and auditors are elected by the General Assembly of the shareholders [1939] for a term of three years. [1948]

Three managers are to be chosen from candidates recommended by the Minister of Finance.

Two managers are to be chosen from outstanding personalities of financial institutions of public interest.

Two managers are to be chosen from nominations made by the most representative worker's organization.

Three managers are to be chosen from nominations made by the most representative industrial, commercial and agricultural organizations. [1948]

ART. 26. Members of the Legislative Chambers are not to hold the office of Governor, Vice-Governor, director, manager or auditor. [1939]

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Relations with the Government

ART. 29. The Minister of Finance has the right to control all the operations of the Bank. He may oppose the execution of any measure contrary to the law, to the by-laws or to the interest of the State. This control is vested in a Government Commissioner.

ART. 30. The Government Commissioner is appointed by the King. He superintends all operations of the Bank. He may suspend and report to the Minister of Finance any decision contrary to the law, the by-laws or to the interest of the State.

If, upon such suspension and report, the Minister of Finance takes no action within eight days, the original decision may be executed. [1939]

CANADA

Bank of Canada Act (assented to July 3, 1934) as amended by an Act to amend the Bank of Canada Act (1 Edward VIII, Chapter 22, 1936) and an Act to amend the Bank of Canada Act (2 George VI, Chapter 42, 1938)

Capital

17. (1) The capital of the bank shall be five million dollars but may be increased from time to time pursuant to a resolution passed by the Board of Directors and approved by the Governor in Council and by the Parliament of Canada.

(2) The capital shall be divided into one hundred thousand shares of the par value of fifty dollars each, which shall be issued to the Minister to be held by him on behalf of the Dominion of Canada. [1938]

Management

5. (1) The Bank shall be under the management of a Board of Directors composed of a Governor, a Deputy Governor and eleven directors . . . [1938]

(2) In addition to the Members of the Board . . . the Deputy Minister of Finance or, in case of his absence or incapacity at any time, such other officer of the Department of Finance as the Minister may nominate for the time being, shall be, by virtue of his office or of such nomination, as the case may be, a member of the Board, but shall not have the right to vote. [1934]

6. (2) No person shall hold office as Governor or Deputy Governor or Assistant Deputy Governor, who, . . .

(b) is a member of either House of Parliament or of a Provincial legislature; or

(c) is employed in any capacity in the public service of Canada or of any province of Canada or holds any office or position for which any salary or other remuneration is payable out of public moneys . . . [1936]

8. (1) The Governor, Deputy Governor and Assistant Deputy Governor shall each be appointed as hereinafter provided for a term of seven years or, in the case of the first Governor, Deputy Governor and Assistant Deputy Governor, for such shorter period as the Governor in Council may determine.

(2) The first Governor, Deputy Governor and Assistant Deputy Governor shall be appointed . . . by the Governor in Council and thereafter appointments shall be made by the directors with the approval of the Governor in Council. [1934]

9. (1) The Minister with the approval of the Governor in Council shall in each year appoint for terms of three years each a sufficient number of directors to provide that there shall be eleven directors . . .

7. (1) The Governor of the Bank shall be the chief executive officer and shall on behalf of the Board have the direction and control of the business of the Bank, with authority to act in connection with the conduct of the business of the Bank in all matters which are not by this Act or by the by-laws of the Bank specifically reserved to be done by the Board or by the Executive Committee. [1938]

13. (1) There shall be an Executive Committee of the Board consisting of the Governor, the Deputy Governor and one director selected by the Board.

(2) In addition to the Members of the Executive Committee as constituted by subsection one of this section, the Deputy Minister of Finance or, in case of his absence or incapacity at any time, such other officer of the Department of Finance as the Minister may nominate for the time being shall be by virtue of his office or of such nomination, as the case may be, a member of the Executive Committee, but shall not have the right to vote. [1934]

Relations with the Government

14. (1) The Governor, or in the event of his absence or incapacity the Deputy Governor only, shall have power to veto any action or decision of the Board of Directors or of the Executive Committee, and if this veto power be exercised, the Governor or Deputy Governor, as the case may be, shall within seven days inform the Minister in writing of the circumstances and the Minister shall submit the veto to the Governor in Council who may confirm or disallow the veto.

(2) Any director or member of the Executive Committee may inform the Minister in writing of his view of the action or decision in question, which view shall also be transmitted to the Governor in Council. [1936]

CHILE

Revised text of the Law No. 486 of August 21, 1925 on the Banco Central de Chile

Capital

ART. 6. The authorized capital of the Bank shall be 150 million pesos . . .

ART. 12. The shares shall be divided into four classes . . . to be called A, B, C and D.

ART. 13. Shares of class A shall total 20 million pesos and shall be subscribed to entirely by the State.

ART. 19. All commercial national banks established in Chile . . . shall subscribe to class B shares . . . to the extent of 10 percent of their paid-in capital and their reserves . . .

ART. 23. Only foreign banks which . . . do banking business in Chile may own shares of class C.

ART. 31. Shares of class D may be subscribed to by any natural or juridical person . . .

Management

ART. 33. The Bank shall be administered by a Board of Directors composed of ten members . . .

ART. 34. . . . the government shall name three Directors . . . who shall not be members of Congress . . .

ART. 35. The holders of class B shares shall elect . . . two directors . . .

ART. 36. The holders of class C shares shall elect . . . one director . . .

ART. 37. The holders of class D shares shall elect . . . one director . . .

ART. 39. Besides these seven Directors, three more shall be chosen as follows:

one jointly by the Sociedad Nacional de Agricultura and the Sociedad de Fomento Fabril:

one by the Corporación de ventas de Salitre y Yodo de Chile and the Cámara Central de Comercio de Chile;

one by the labor unions . . .

CUBA

The National Bank of Cuba Law, No. 13, of December 23, 1948

Capital

ART. 4. The Authorized capital of the National Bank of Cuba shall be ten million pesos, represented by one hundred thousand registered shares of one hundred pesos each. Said shares to be classified in two series of which Series A shall consist of fifty thousand and one shares and shall be for the account of the State, while Series B shall consist of forty-nine thousand nine hundred and ninety-nine shares, and shall be for the account of the private commercial and/or savings banks operating in the national territory.

ART. 5. At the time of its constitution the National Bank of Cuba shall issue twenty-five thousand and one Series A shares, which shall be subscribed and paid for by the State, and twenty-four thousand nine hundred and ninety-nine Series B shares, which shall be subscribed and paid for by the commercial and/or savings banks in proportion to the average of the deposits of all kinds which each Bank shall have had on hand during the calendar year immediately preceding the constitution of the National Bank of Cuba.

Management

ART. 18. The National Bank of Cuba shall be governed by the Assembly of Stockholders, the Board of Direction and the President of the Institution.

ART. 19. The Assembly of Stockholders shall be composed of the natural or artificial persons who may be holders of Series B shares. Its meetings shall be called and presided over by the President of the National Bank of Cuba.

ART. 23. The Board of Direction shall consist of five members, of whom three shall be appointed and two shall become automatically encumbered as such by reason of their offices, as follows:

(a) One shall be designated by the President of the Republic with the approval of the Council of Ministers. This Director shall act as President of the National Bank of Cuba.

(b) One shall be appointed by the national banks.

(c) One shall be appointed by the foreign banks.

(d) The President of the Agricultural Credit Bank when such a bank is created by Law. And,

(e) The Director of the Currency Stabilization Fund.

The incumbent Minister of the Treasury may attend the meetings of the Board of Direction and shall have the right to speak thereat, but not to vote.

The designation referred to in paragraph (a) above, must be approved by the Senate of the Republic . . .

The appointment of the Director of the Currency Stabilization Fund must be approved by the Senate of the Republic.

ART. 28. Said offices shall be incompatible with any and all paid offices or posts of the State, the Provinces, the Municipalities, and autonomous agencies . . .

DENMARK

The National Bank of Denmark Act of April 7, 1936

Capital

2. The General Capital Fund of the Bank shall be Kroner 50 millions.

29. The General Capital Fund of Art. 2 shall be paid by the Government . . .

Management

3. The management of the Bank shall be entrusted to a Board of Directors, a Committee of Directors and a Board of Governors.

4. The Board of Directors shall consist of 25 members, viz.:

(a) 8 members with a seat in the Rigsdag.

(b) 2 members, of which one shall be an economist, the other a lawyer. These members, who must not be members of the Rigsdag, shall be appointed by the Minister of Trade, Industry and Shipping.

(c) 15 members with a thorough knowledge of trade, industry and agriculture. These members, who must not be members of the Rigsdag, shall be elected by the Board of Directors so that 3 members retire every year. Due regard shall be paid at the election to establishing a comprehensive representation of trade, industry and agriculture including the workers occupied in trade, industry and agriculture, and to securing a representation of the geographical divisions of the country.

5. The Committee of Directors shall be composed of the 2 members of the Board of Directors mentioned in Paragraph 4 b, together with 5 members elected for 1 year by the Board of Directors from among its members.

6. The Board of Governors shall consist of 3 members. One of the Governors shall be nominated by the King, and the other Governors appointed by the Board of Directors on the recommendation of the Committee of Directors. The first-mentioned Governor shall be chairman of the Board of Governors.

Relations with the Government

7. The Minister of Trade, Industry and Shipping in his capacity of Royal Bank-Commissioner shall ensure that the Bank fulfils its obligation under this present Act and under the ordinances and provisions given pursuant to this present Act.

The Royal Bank-Commissioner presides at the meetings of the Board of Directors. He shall have admission to the meetings of the Committee of Directors and be supplied with any information he may desire concerning the Bank.

Decisions of particularly far-reaching character cannot be taken at a meeting of the Committee of Directors when the Royal Bank-Commissioner is not present unless he has been informed in advance that the matter is to be dealt with at the meeting.

FRANCE

Decree on the Codification of Bank of France Statutes of December 31, 1936; Law No. 45-015 of December 2, 1945 on the Nationalization of the Bank of France, and Decree of December 6, 1944 on the Laws and Statutes of the Bank of France.

Capital

ART. 1. As of January 1, 1946 the Bank of France is nationalized. The shares of the Bank will be transferred to the state, which will hold them as its property. [1945]

Management

ART. 16. The direction of Bank affairs is exercised by a governor.

ART. 18. The Governor and two Deputies are appointed by the President of the Republic.

ART. 20. The positions of oGvernor and Deputy Governor are incompatible with any elective office. [1936]

ART. 44. The Bank is administered by twelve Councillors.

ART. 46. (2) One councillor is to be elected in a secret election by the employees of the Bank of France.

(3) Seven councillors are appointed by the Minister of Finance upon suggestion of the competent ministers as follows:

Two representing commerce and industry in cosmopolitan France;

Four representing agriculture, labor, the interests of the colonies, and the French interests abroad, respectively;

One representing the general economic interests.

(4) The following four are members by law:

(a) the General Manager of the Caisse des Depots et Consignations;

(b) the Governor of the Credit Foncier de France;

(c) the General Manager of the Credit National;

(d) the General Manager of the Caisse Nationale de Credit Agricole. [1944]

The National Credit Council

ART. 12. There shall be created a National Credit Council under the presidency of a Minister appointed by the Government who may delegate his powers to the Governor of the Bank of France, vice president, ex-officio.

In addition to the president or vice president, the National Credit Council shall include 38 members, to wit:

Seventeen representatives of the country's principal activities.

Ten appointed by decree of the Minister of National Economy, to wit; two on proposal of the General Confederation of Agriculture; five on proposal respectively of the agricultural cooperatives, the consumer cooperative group, the producer cooperative group, the National Center for Foreign Trade, and the Assembly of Presidents of Craft Unions, two, of whom one shall be an industrialist, on proposal of the Assembly of Presidents of Chambers of Commerce, and one on proposal of the Union of Chambers of Maritime Commerce. Seven proposed by the most representative labor unions of whom three, appointed by the Minister of National Economy, shall represent the general interests of these organizations, and four, appointed by the Minister of Labor, shall represent the staff and employees of banks:

Seven representing the Ministers of National Economy, of Industrial Production, of Public Works and Transportation, of Agriculture, of Reconstruction and Town Planning, of Colonies, and of the body charged with the preparation of the Plan;

Seven representatives appointed by the Minister of Finance because of their financial or banking competence, of whom three shall represent the nationalized banks, two the nonnationalized banks on proposal of the Professional Banking Association, one to represent the agencies for financing foreign trade and one to be the Syndic of the Paris Stock Brokers' Association.

Seven representatives of public or semi-public financial institutions:

The General Manager of the Caisse des Depots et Consignations;

The Governor of the Credit Foncier de France;

The President-General Manager of the Credit National;

The General Manager of the Caisse Nationale de Credit Agricole;

The Manager of the Caisse Centrale de la France d'Outre-Mer;

The Manager of the Association (Chambre Syndicale) of the Banques Populaires;
The Manager of Postal Check Division at the Ministry of Posts, Telegraphs, and Telephones. [1945]

FEDERAL REPUBLIC OF GERMANY

United States Area of Control Law No. 60 of February 15, 1948,—Establishment of a Bank Deutscher Laender; and Transitional Law changing the Law on the Establishment of the Bank Deutscher Laender of August 10, 1951.

Capital

25. (a) The capital of the Bank shall be one hundred (100) million Reichsmarks. All Land Central Banks within the area in which this Law is effective shall subscribe to the capital of the Bank in proportion to the amounts of their deposits on the effective date of this law . . . [1948]

Management

20. The policies of the Bank shall be determined by the Board of Directors and executed by the Board of Managers.
21. (a) The Board of Directors shall consist of a Chairman, the President of the Board of Managers, and the Presidents of each of the member Land Central Banks.
(d) The Chairman of the Board of Directors shall be elected by a simple majority of the members of the Board . . . the Chairman shall not be . . . a member of the Board of Directors or Board of Managers of any member Land Central Bank.
24. (a) The Board of Managers shall consist of a President, a Deputy and a number of Managers to be fixed by the by-laws.
(b) The President of the Board of Managers and his Deputy shall be elected and their terms of office fixed, by the Board of Directors, excluding the Chairman of the Board of Directors and the President of the Board of Managers, who for this purpose, shall not vote. The other members of the Board of Managers shall then be appointed by the full Board of Directors for such terms as may be determined by the Board of Directors . . .
(d) The President of the Board of Managers shall be responsible to the Board of Directors for the execution of all decisions of the Board of Directors and for the general conduct of the business of the Bank. [1948]

Relations with the Government

6. (a) The Bank is obliged to give consideration to the General economic policy of the government, and to support such policy within the framework of its tasks.
(b) The Federal Ministers of Finance and Economy or their representatives have the right to participate in the meetings of the central bank council. They can also demand the calling of a meeting. They have no vote but may submit proposals.
(c) If, in the opinion of a representative of the government, there are objections to a decision of the central bank council, the government representative may demand suspension of the decision for up to eight days.
7. The Bank Deutscher Laender has to submit such reports and give such information to the government as the government may require. [1951]

GREAT BRITAIN

Bank of England Act of February 14, 1946

9 & 10 Geo. 6

Capital

1. (1) On the appointed day
(a) the whole of the existing capital stock of the Bank . . . shall, by virtue of this section, be transferred, free of all trusts, liabilities and incumbrances, to such person as the Treasury may by order nominate, to be held by that person on behalf of the Treasury;

Management

2. (1) On the appointed day, all persons who are, immediately before that day, holding office as Governor, Deputy Governor or director of the Bank shall vacate their office, and on and after that day there shall be a Governor, a Deputy

Governor and sixteen directors of the Bank, who shall be the court of directors.
(2) The Governor, Deputy Governor and other members of the court of directors shall be appointed by His Majesty.
4. A person shall be disqualified for holding the office of Governor, Deputy Governor or director if
(a) he is a Member of the Commons House of Parliament or a Minister of the Crown, or a person serving in a Government Department in employment in respect of which remuneration is payable out of moneys provided by Parliament . . .

Relations with the Government

4. (1) The Treasury may from time to time give such directions to the Bank as, after consultation with the Governor of the Bank, they think necessary in the public interest.
(2) Subject to any such directions, the affairs of the Bank shall be managed by the court of directors in accordance with such provisions (if any) in that behalf as may be contained in any charter of the Bank for the time being in force and any by-laws made thereunder.

INDIA

The Reserve Bank of India Act, 1934 (assented to by the Governor General on March 6, 1934) as amended by the Reserve Bank (transfer to Public Ownership) Act, 1948

Capital

3 (1) On the appointed day—
(a) all shares in the capital of the Bank shall by virtue of this Act be deemed to be transferred free of all trusts, liabilities and encumbrances to the Central Government; and
(b) as full compensation therefor, the Central Government shall issue to every person who, immediately before the appointed day, is registered as the holder of any such shares an amount calculated at the rate of one hundred and eighteen rupees and ten annas per share, in promissory notes of the Central Government bearing interest at the rate of three percentum per annum repayable at par on such date as may be specified in this behalf by the Central Government . . . [1948]

Management

7 (1) The Central Government may from time to time give such directions to the Bank as it may after consultation with the Governor of the Bank, consider necessary in the public interest.
(2) Subject to any such directions, the general superintendence and direction of the affairs and business of the Bank shall be entrusted to a Central Board of Directors which may exercise all powers and do all acts and things which may be exercised or done by the Bank.
(3) Save as otherwise provided in regulations made by the Central Board, the Governor shall have full powers to transact all the business of the Bank which may be transacted by the Central Board. [1948]
8 (1) The Central Board shall consist of the following, namely:
(a) A Governor and two Deputy Governors to be appointed by the Central Government;
(b) Four Directors to be nominated by the Central Government, one each from the four Local Boards . . .
(c) Six Directors to be nominated by the Central Government; and
(d) One government official to be nominated by the Central Government. [1948]

JAPAN

The Bank of Japan Law

Law No. 67 of February 24 of the 17th Year of Showa (1942) As revised by Finance Ministry Ordinance No. 101 of November 25 of the 20th Year of Showa (1945); Law No. 46 of April 1 of the 22nd Year of Showa (1947); Law No. 197 of December 17 of the 22nd Year of Showa (1947); Law No. 110 of July 7 of the 23rd Year of Showa (1948); Law No. 191 of June 3 of the 24th Year of Showa (1949)

Capital

ART. 5. The capital of the Bank of Japan shall be Yen 100,000,000 . . .

The Government shall subscribe to the capital of the Bank of Japan Yen 55,000,000 in accordance with the provisions of Imperial Ordinance.

Management and relations with the Government

ART. 13–2. There shall be established a Policy Board in the Bank of Japan, and the Policy Board shall be authorized and empowered to formulate, direct or supervise the execution by the Bank of Japan . . . of basic monetary, credit control and other banking policies pertaining to the function of the Bank of Japan as the central bank . . .

ART. 13–4 The Policy Board shall be composed of seven members.

The members of the Board shall be as follows:

1. The Governor of the Bank of Japan;
2. A person representing the Ministry of Finance;
3. A person representing the Economic Stabilization Board;
4. Two persons of outstanding experience and knowledge of financial affairs. One experienced and having knowledge of prefectural banks and one experienced and having knowledge of large city banks;
5. A person of outstanding experience and knowledge of commercial and industrial affairs;
6. A person of outstanding experience and knowledge of agricultural affairs.

Those members who come under Items 4, 5 and 6 of the preceding paragraph . . . shall be appointed by the Cabinet with the approval of both Houses.

ART. 14. The officers of the Bank of Japan shall be composed of one Governor, one Vice-Governor, three or more Directors, two or more Auditors and a number of Advisers.

ART. 16. The Governor and Vice-Governor shall be appointed by the Cabinet. The Directors shall be appointed by the competent Minister from among persons recommended by the Governor.

The Auditors shall be appointed by the competent Minister.

The Advisers shall be appointed by the competent Minister from among persons engaged in finance or industry, or men of learning and experience.

ART. 42. The Bank of Japan shall be under the supervision of the competent Minister.

ART. 43. The competent Minister may, if deemed specially necessary for the attainment of the object of the Bank of Japan, order the Bank to undertake any necessary business, or order alterations in the By-law as well as other necessary actions.

NETHERLANDS

Bank Act 1948 of April 23, 1948 (Staatsblad No. I 166) and Act Concerning the Nationalization of the Shares of the Nederlandsche Bank of April 23, 1948 (Staatsblad No. I 165)

ART. 1. For the purposes of this Act:

1. The Bank means: De Nederlandsche Bank N. V.
2. Our Minister means: Our Minister of Finance [1948, No. 166]

Capital

ART. 4. The social capital of the Bank is twenty million guilders, fully paid up. [1948, No. 166]

ART. 2. The shares . . . of the Nederlandsche Bank are nationalized by the State and have completely and solely become the property of the State [1948, No. 165]

Management

ART. 22. (1) The Governing Board of the Bank shall consist of a President and a Secretary, together with at least three and at most five Executive Directors.

(2) The number of Executive Directors shall be determined by the combined meeting of the Governing Board and the Board of Commissaries.

ART. 23. (1) The President and the Secretary shall be appointed by Us; their term of office shall be seven years. The Governing Board and the Board of Commissaries shall in a combined meeting draw up a nomination list containing the names of two persons for either position. This list shall be submitted to Us for such consideration and action as We shall deem appropriate.

(2) The Executive Directors shall be appointed by Us for a term of seven years from a nomination list containing the names of three persons for each position, to be drawn up by a combined meeting of the Governing Board and the Board of Commissaries and to be submitted to Us by the Governing Board . . .

ART. 32. (1) There shall be a Bank Council, consisting of 17 members, viz.

a. the Royal Commissioner;

b. four members to be appointed by and from the Board of Commissaries;

c. twelve members to be appointed by Us in the way indicated in the next paragraph.

(2) The appointment of the members, mentioned under c, shall take place, awaiting the coming into being of a public organization of trade and industry, from an alphabetic nomination list containing the names of two persons for each position, to be drawn up by Us, which assignment shall aim at a representation of commerce (inclusive of transport), industry and agriculture each with two members, and of the central labor organizations and experts on finance and banking not belonging to any of the aforementioned four groups, each with three persons. [1948, No. 166]

ART. 27. (1) The Board of Commissaries shall consist of twelve members.

(2) The members of the Board of Commissaries shall be appointed, subject to the provisions of article 38, by the share holders . . .

ART. 38. The first appointment of the members of the Board of Commissaries . . . shall be made by Our Minister in concurrence with the Governing Board . . .

Relations with the Government

ART. 26. (1) Whenever Our Minister, in order to coordinate the monetary and financial policy of the Government with the policy of the Bank, deems it necessary Our Minister shall, after having heard the Bank Council, issue to the Governing Board such directions as he thinks necessary for attaining that purpose. Subject to the provisions of the next paragraph, the Governing Board is bound to follow those directions.

(2) If the Governing Board should object to following the directions referred to in the previous paragraph, the Governing Board shall be at liberty to bring those objections in writing to Our notice within three days after having received such directions. We thereupon decide whether the directions shall be followed.

ART. 30. (1) On behalf of the Government a Royal Commissioner, to be appointed and removed from office by Us, shall supervise the affairs of the Bank.

(2) The Royal Commissioner shall be entitled to attend all meetings . . . of the Board of Commissaries, the combined meetings of the Governing Board and the Board of Commissaries included, and shall have an advisory vote at such meetings.

(3) The Governing Board of the Bank is bound to furnish the Royal Commissioner at his request with whatever information he may deem requisite for the proper discharge of his duties of supervision. [1948, No. 166]

NEW ZEALAND

Reserve Bank of New Zealand Act, 1933 (of November 27, 1933) as amended by the Reserve Bank of New Zealand Amendment Act, 1936 (of April 8, 1936) and the Reserve Bank of New Zealand Amendment Act, 1950 (of August 25 1950)

Capital

2 (1) On the commencement of this Act all shares in the capital of the Reserve Bank shall be deemed to be cancelled, and . . . the . . . registered shareholders . . . shall . . . be entitled . . . to receive for every . . . share either the sum of six pounds five shillings in cash or a like amount in New Zealand government stock.

3 (1) . . . the Minister of Finance shall . . . pay to the Bank an amount equal to the total amount paid by the Bank to its shareholders . . . [1936]

Management

23 (1) There shall be a Board of Directors of the Bank, consisting of a Governor, Deputy Governor, and seven other members . . .

(2) In addition to the members hereinbefore provided for, the Secretary of the Treasury shall, by virtue of his office, be a member of the Board, but shall not be entitled to vote at any meeting of the Board.

25 (1) The first Governor and Deputy Governor shall be appointed by the Governor-General in Council for a term of seven years . . .

(2) On the expiry of the term of office of the first Governor and Deputy Governor . . . the Governor and Deputy Governor shall be appointed by the Governor-General in Council on the recommendation of the Board of Directors . . . [1933]

(The) members of the Board of Directors shall . . . be appointed by the Governor-General in Council for a term of five years. [1933 (28) and 1936 (5.7)]

Relations with the Government

3 (1) In the exercise of their functions and powers . . . the Governor and the Board of Directors shall give effect to any resolution of the House of Representatives in respect of any functions or business of the Reserve Bank. [1950]

NORWAY

The Norges Bank Act of April 23, 1892 with amendments of July 13, 1905; May 25, 1917; July 6, 1923; May 22, 1931; and July 3, 1949.

Capital

Part A. Shares of the Norges Bank which belong to others than the state will be transferred to the government against compensation as of December 31, 1949. . . [1949]

Management

Art. 20. The Bank shall have a Supervisory Council consisting of fifteen members, and a Managing Board of Directors consisting of five members. . . [1931]

Art. 21. The members of the Supervisory Council shall be elected by the Storting for a term of six years. Every three years seven or eight members, alternately, shall retire from office. Seven substitutes shall be elected every three years. . .

Art. 22. The Governor and the Deputy-Governor of the Bank shall be appointed by the King, who shall previously have heard the opinion of the Supervisory Council. The appointments are made subject to the reciprocal right to terminate the appointment on six months' notice. . . The other three Directors shall be elected by the Storting for a term of six years. . . [1917]

Art. 27. It shall be the duty of the Supervisory Council. . .

(b) to assign to the Governors, the Deputy Governor and the other members of the Board of Directors the functions which they are to undertake. . . [1905]

Art. 28. It shall be the duty of the Board of Directors to ensure that the business of the Bank is conducted in accordance with this Act and the decisions of the Supervisory Council. . . [1905]

Art. 32. No member of the Government may, so long as he holds such position, act as a member of the Supervisory Council, as a Director or as a member of a Board of Management. . . [1923]

THE REPUBLIC OF THE PHILIPPINES

Republic Act No. 265 of June 15, 1948

Capital

Art. 1, Sec. 1. The Capital of the Central Bank shall be ten million pesos, which are hereby appropriated from the assets of the Exchange Standard Fund . . .

Management

Art. 2, Sec. 5. The Powers and functions of the Central Bank shall be exercised by a Monetary Board, which shall be composed of seven members, as follows:

(a) The Secretary of Finance, who shall preside at the meetings of the Monetary Board . . .

(b) The Governor of the Central Bank, who shall preside at the meetings of the Board in the absence of the Secretary of Finance. The Governor shall be appointed for a term of six years by the President of the Philippines with the consent of the Commission on Appointments.

(c) The President of the Philippine National Bank . . .

(d) The Chairman of the Board of Governors of the Rehabilitation Finance Corporation . . .

(e) Three other members, to be appointed for terms of six years by the President with the consent of the Commission on Appointment . . .

In making appointments to the Monetary Board, the President of the Philippines shall give due regard to affording fair representation of the financial, agricultural, industrial and commercial interests, in the composition of the said Board.

SWEDEN

The Sveriges Riksbank Act of June 30, 1934

Capital

ART. 1. . . . The Sveriges Riksbank is placed under the guarantee of the Riksdag.

ART. 3. The capital of the Riksbank shall be fifty million kronor.

Management

ART. 28. . . . The Riksbank is administered by seven Directors. One Director, with one deputy, is appointed by the King in Council. The remaining six Directors, with three deputies, are elected by the Riksdag. The Director appointed by the King in Council shall be Chairman of the Board of Directors but may not hold any other office in the management of the Riksbank.

The Board of Directors of the Riksbank elect from amongst themselves one Governor of the Riksbank and from amongst or outside themselves one Deputy-Governor to replace the Governor in case of his absence, with the powers and duties of a Director.

ART. 30. A Cabinet Minister . . . may not be a Director of the Riksbank.

ART. 32. The Directors may not receive instructions with regard to the administration of the Riksbank from anyone except the Riksdag and its Banking Committee in cases in which that Committee is competent to give instructions on behalf of the Riksdag; the Directors are not obliged to account for their functions as Directors to anyone except to the Riksdag or its Banking Committee and Auditors.

ART. 33. If the King in Council, either upon the recommendation of the Board of Directors of the Riksbank or else when it is otherwise deemed necessary to do so, has authorized a Representative to confer with the Board of Directors of the Riksbank on some special matter, the Board may discuss with the Representative of the King in Council but must not take any decision in his presence.

SWITZERLAND

Federal law on the Swiss National Bank of April 7, 1921

Capital

ART. 5. The capital of the National Bank is 50 million francs.

Management

ART. 30. The administration of the National Bank is to be organized as follows:

(a) for supervison and control
the General Meeting of the Shareholders
the Bank Council
the Bank Committee
the Local Committees
the Control Commission

(b) for management
the General Directorate
the Local Directorates

ART. 38. At the General Meeting of the Shareholders there shall be a secret election of the members of the Bank Council and the Control Commission.

ART. 40. The General Meeting of the Shareholders shall . . .

(1) nominate 15 members of the Bank Council

(2) nominate the members of the Control Commission . . .

ART. 42. The Bank Council shall be composed of 40 members, nominated for four-year terms, of whom 15 are elected by the General Meeting of the Shareholders and 25 designated by the government.

ART. 43. In the Bank Council there should be, besides representatives of finance, representatives of trade, industry, the arts and professions, and agriculture.

ART. 44. The government shall appoint the president and vice-president of the Bank Council. The General Meeting of the Shareholders shall elect 15 members of the Bank Council and notify the government of its selections. The government then shall appoint the other 23 members, of whom five or more can be members of Parliament, and five or more members of the cantonal governments. In the choice of these 23 members an equitable distribution according to the important centers of banking, commerce, and industry ought to be provided for.

ART. 45. The Bank Council exercises general supervision over the affairs of the Bank . . .

ART. 50. A Bank Committee of seven members appointed for four-year terms by the Bank Council shall exercise the regular supervision and control by virtue of authorization of the Bank Council.

The Committee shall include the President, Vice-President and five other members of the Bank Council. Any one canton shall be represented by no more than one member.

ART. 54. The General Directorate is the highest executive authority of the Bank . . .

ART. 55. The General Directorate is composed of three members . . . The members are appointed by the government, upon suggestion by the Bank Council, for six-year terms. The government designates the President and Vice-President from the three members of the General Directorate.

43. Discuss and evaluate, as far as your available information permits, the relative use of selective and general credit controls in foreign countries.[16]

The basic distinction between general and selective credit controls can be set out briefly. General credit controls operate to reduce (or increase) the total volume of credit existing in the economy while selective controls are designed to discourage (or encourage) the extension of credit to particular classes of borrowers for particular purposes. General credit controls are quantitative: they determine or help to determine the total volume of credit outstanding but permit competition among borrowers to allocate that credit among the thousands of different uses for which credit is desired. Selective controls are qualitative: they permit the monetary authorities to influence the distribution of credit among the various classes of potential borrowers.

Numerous innovations in both types of control reflect the changed monetary and economic conditions which have characterized the postwar situation in many foreign countries. These are described in the following pages. A final section suggests tentative conclusions regarding the relative efficiency of selective and general credit controls under varying economic conditions and within varying frameworks of political and social institutions.

GENERAL OR QUANTITATIVE CREDIT CONTROLS

General credit controls are the traditional instruments of central bank policy and are used in all countries where central banking facilities exist. In recent years statutory commercial bank cash reserve requirements have been incorporated in the monetary legislation of a number of countries where they had not previously existed and new forms of quantitative controls have been devised in the form of special reserve requirements, differential reserve requirements, rediscount ceilings, and overall limits on commercial bank lending. A number of the new measures which have evolved out of old forms of quantitative

[16] The answer to this question was prepared on the basis of information available in November 1951.

controls have taken on qualitative aspects, as will be indicated in the discussion of specific measures undertaken in various countries.

1. Statutory Cash Reserve Requirements

The requirement that commercial banks maintain minimum balances with the central bank was first included in the legislation setting up the Federal Reserve System in the United States. South Africa followed suit in the early twenties and New Zealand, India and some Latin American countries [17] in the early thirties. Elsewhere there was, as a rule, no provision in the statutes for minimum balances to be maintained with the central bank although the commercial banks frequently maintained such balances voluntarily and were, of course, required in many countries to maintain minimum cash reserve ratios. Originally these ratios were regarded almost exclusively as a means of insuring that funds would be available for the normal drawings of depositors; they were not considered as a general monetary policy technique for influencing the availability of funds for new bank loans and investments and hence the aggregate money supply. Moreover, until the early postwar years, only very few foreign central banks had statutory authority to change commercial bank cash reserve requirements in accordance with their general monetary policies. The earliest instances of the grant of such authority to foreign central banks are found in New Zealand and a few Latin American countries.

In recent years, however, statutory authority for the central bank to fix and change commercial bank cash reserve requirements has become a common feature of new central bank legislation. Such provisions are now incorporated in the monetary legislation of many Latin American countries, the Philippines and other eastern countries. Several Western European countries also have imposed statutory cash reserve requirements in recent years. In Belgium and Sweden, provision for the establishment of formal reserve requirements was made in 1935 and 1937, respectively, but these requirements were actually imposed in Belgium only in 1946, and in Sweden in 1950 in a form that combines cash reserves with special reserves to be held in government securities. The Western German central bank, established in 1948, was given statutory power both to fix and to change reserve requirements, and Germany's credit policy has involved substantial use of the latter power.[18]

2. Special Reserve Requirements

The term special reserves as used here refers to any reserve requirement which permits or requires inclusion of assets other than cash. In many countries, commercial banks are now required to hold reserves consisting either of government securities alone or of varying proportions of government securities, cash, and immobilized balances

[17] Earlier legislation in Latin America normally gave commercial banks the option of maintaining part or all of their reserves with the central bank.

[18] In December 1948 the required reserves for commercial bank demand deposits at so-called "banking places" were raised by the German central bank authorities from 10 percent to 15 percent, but in 1949 they were relaxed in two stages to 10 percent. In October 1950 they were raised again to 15 percent. For time deposits the requirements were also increased in October 1950, while for savings deposits they remained unchanged. These changes in the commercial bank reserve requirements reflect to a considerable degree the financial and economic developments in Germany during recent years. Their increase in 1948 was intended to limit credit availabilities; their reduction in 1949 indicated that the fear of inflationary pressures was allayed at that time; and it was not until after the impact of the chain of events that began in the summer of 1950 that reserve requirements were raised anew.

with the central bank. In a few countries nongovernment securities or other assets can also be counted as reserves. In some countries government securities are counted as part of the standard legal reserves; in other countries they are counted as supplementary reserves. The regulations vary considerably from country to country.

The purposes underlying adoption of the special reserve technique appear also to have differed in different countries. Insofar as the special reserve requirements were supplementary to basic reserve requirements, they performed the important function of reducing the liquidity of the banking system and lowering the ratio of credit expansion which could be associated with any given level of, or any given increase in, deposit liabilities. To the extent that government securities were made a part of the reserve requirements, the commercial banks were prevented from selling such securities to the central bank directly or indirectly. By reducing the extent to which the commercial banks could monetize their government security holdings, the banks have been forced in some instances to resort to the rediscount of commercial paper with the central bank. In these instances the rediscount policy of the central bank has thus become a more effective method of general credit control. In addition, a country establishing reserve requirements in government securities may, by the same token, channel to the treasury a portion of the commercial bank resources and may permit a reduction in the treasury's direct recourse to the central bank for finance.

As is explained in the answer to Question 44, government debt held in commercial bank compulsory reserves is thus insulated from the debt held otherwise and reserve requirements of this type may ease the debt management problems of the government, even though this may not be the primary purpose for which they are adopted. In some countries outside of Western Europe, special reserve requirements appear to have been introduced primarily for the purpose of creating or developing a government bond market. By permitting nongovernment paper to be included in special reserves, some South American countries have encouraged the commercial banks to increase selected types of private credit deemed particularly desirable by the government. Thus a qualitative or selective element has been added to a basically quantitative control mechanism.

In some countries, the special reserves in government securities are combined with cash reserves. In Belgium such requirements were imposed in January 1946 at 60 percent of average demand and other short-term liabilities; four-fifths of the required reserves must be held in the form of short-term treasury bills specially issued for the purpose. While in Belgium the reserve requirements are uniform, those established in the Netherlands in January 1951 vary in accordance with the individual position of each bank. Their net effect is that each commercial bank is left with a limited amount of excess reserves and accordingly may increase the amount of credit outstanding only to a small extent before being obliged to have recourse to rediscounting with the central bank. The reserves are held in cash and short-term government paper.[19]

[19] Banks may avoid full compliance with the special reserve requirements by agreeing to limit total private credits to no more than 1C5 percent of the level at the end of September, 1950.

In Sweden, under regulations in force since October 1950, the required reserves are equal to 10 percent of commercial bank liabilities other than savings deposits. Forty percent of the reserves must be held in cash (one-quarter of such cash to be held on deposit with the central bank) and the remainder may be held in short-term government paper. In contrast to the situation in Belgium and the Netherlands, where the effect of the special requirements was to tie down commercial bank holdings of treasury bills, the Swedish regulations actually forced some banks to sell treasury bills and government bonds in order to comply with the cash reserve requirements.

In some Latin American countries—for instance in Brazil, Chile, Mexico, and Uruguay—and also in India and the Philippines, the required commercial bank reserves are also held partly in cash and partly in government securities. In a few cases they can be held to some extent in nongovernment paper. In Mexico, the reserves include types of loans that the authorities wish to promote and as a result the requirements have a qualitative aspect.

In India, the larger so-called "scheduled" banks have long been required to maintain minimum reserves with the Reserve Bank of India. Legislation enacted in March 1949 established minimum requirements for the "non-scheduled" banks as well. In addition this legislation required all banks, effective March 1951, to maintain in cash or in government or other approved securities not less than 20 percent of their time and demand liabilities in India; balances maintained at the Reserve Bank may be counted toward the required 20 percent. Previously, the required reserves against demand liabilities were only 5 percent.

No minimum cash holdings are required for commercial banks in France and Italy. In France, the reserves consist only of treasury bills and other prescribed securities, such as acceptances of the Credit National, a semi-governmental institution financing French reconstruction. The commercial banks must maintain holdings of treasury bills and other securities at not less than 95 percent of the total volume of such holdings at the end of September 1948. In Italy, the required reserves must be held either in government or government guaranteed securities on deposit at the Bank of Italy or in interest-bearing accounts immobilized at the Bank of Italy or the treasury. The required reserves amount to 20 percent of commercial bank deposits in excess of 10 times the bank's capital and surplus, or to 15 percent of total bank deposits, whichever is smaller.

Within limits prescribed in the pertinent legislation, the special reserve requirements can, as a rule, be modified by the monetary authorities in accordance with changing circumstances.

3. Differential Reserve Requirements

In some countries the commercial banks are required to hold additional reserves against *increases* in deposits. The earliest instance of this type of requirement appears to be the Australian "special accounts" introduced as a wartime expedient in 1941 and made a permanent feature of the Australian banking system in 1945. Under the Australian system, commercial banks are required to maintain a varying proportion of new assets in special accounts at the Commonwealth Bank. During the war virtually all assets of each commercial bank in excess of those held in August 1939 were impounded in these accounts. From mid-1945 to mid-1948 the requirement was reduced to 45 percent; the proportion was increased somewhat after July 1948, and in 1950 about 60 percent of the increase in bank assets was thus immobilized.

Other countries use this technique in a somewhat different form. In France, 20 percent of any new deposits in excess of the deposits in September 1948 must be invested in government securities. In Italy, 40 percent of any increase in a commercial bank's deposits above the level of October 1947 is to be set aside either in government securities or in a special account at the Bank of Italy or the treasury until the Bank's total reserves reach 25 percent of its total deposits. In the Netherlands, under regulations in force since January 1951, out of any increase in commercial bank deposits over the level of September 1950, only one-third (at most) can be used as a base for business loans while at least two-thirds must be matched by an increase in cash, balances with banks, call money and treasury bills.

Some Latin American countries have also had recourse to differential reserve requirements as an additional device to slow down bank credit expansion. Mexico requires that commercial banks maintain a 100 percent reserve against any increase in demand deposits above the September 1949 level.[20] Furthermore, since January 1951, any increase in commercial bank deposits has had to be kept in full with the central bank. Three other Latin American countries impose restrictive reserve requirements on that portion of deposits which exceeds specified multiples of the individual bank's capital structure.[21]

4. *Rediscount Ceilings*

Still another technique of control consists of rediscount ceilings fixed by the monetary authorities both for individual commercial banks and for the banking system as a whole. This device has been of particular importance in France, Germany, and Denmark. While rediscount ceilings are basically quantitative control devices, they frequently include selective, or qualitative, aspects.

In France, until September 1948, the commercial banks had been able to rediscount commercial bills without limit, the discounting of commercial paper having been excluded from the selective credit controls (see below) established in 1947. The exclusion of commercial bills from selective control had proved to be a loophole through which manufacturers and traders were able to obtain access to bank credit of a type which the restrictions on loans and advances had been intended to deny them. This loophole was closed in October 1948 by establishing rediscount ceilings individually for each commercial bank; each bank's ceiling was treated as strictly confidential. An over-all maximum was fixed for the banking system as a whole. Once

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[20] Three-tenths of this reserve is in the form of balances with the Bank of Mexico, one-fifth in government or government-guaranteed paper and the remaining one-half in approved commercial securities and bonds.

[21] In Venezuela, all deposits in excess of six times capital and surplus must be backed by a supplementary 40 percent reserve of cash, either on hand or on deposit in the central bank. In Colombia, deposits in no case are to rise above 10 times capital and surplus, and there is a 100 percent reserve against that portion of deposits which is greater than 6⅔ times capital and surplus. In contrast to the basic reserve which may be composed only of cash, the 100-percent reserve may include cash and/or various types of government securities. In Uruguay, the basic reserve requirements apply to deposits up to the level of 5 times the capital structure. For deposits above this level there is a 100-percent reserve requirement except in certain cases.

a bank had reached its rediscount ceiling even prime commercial paper became ineligible for rediscount at the Bank of France.

However, in order to mitigate the sharp effects of over-all rediscount restrictions, the ceiling was set at some 20 percent above the level of rediscounts actually outstanding at the time it was imposed. The volume of rediscounts gradually expanded up to the ceiling, and the ceiling itself was noticeably increased in later years, most recently in October 1951. Furthermore, three types of bills—certain medium-term bills of the Credit National issued to finance industrial re-equipment, certain agricultural bills, and certain treasury paper—were exempted in 1948 from the ceiling. These assets could be rediscounted at the Bank of France, subject to the latter's prior approval and at a rate somewhat higher than the normal rediscount rate. These exceptions were extended in 1949 to include export bills. The restraining effect of rediscount ceilings was therefore by no means absolute. As a matter of fact, the rediscounts not subject to the ceiling accounted for a large share of the continued rise in Bank of France credit to business in recent years. The expansion of credit has, in general, followed predetermined lines, with principal emphasis on the financing of industrial equipment, agricultural crops, and exports.

In Germany, a ceiling was placed in October 1950 on the so-called bankers' acceptance credits, with some exceptions for export credits and harvest financing. In November 1950 the authorities deemed it necessary to reduce rediscount credits to commercial banks and issued regulations calling for a 10 percent reduction below the October 1950 level to be reached by the end of January 1951. Credits granted to public authorities were not affected by this measure. Actually, the percentage reduction in the amount of bills rediscounted was smaller than 10 percent and the particular expedient of relating a reduction to a particular date did not appear in retrospect to be very effective. In February 1951, the central bank announced that rediscount facilities might be withdrawn from commercial banks failing to comply with new credit regulations simultaneously established. These new regulations will be discussed subsequently.

In Denmark, the central bank exercises credit control primarily through restricting rediscounts by the commercial banks. Rediscounting of building loans, which had been an important factor in monetary expansion, was discontinued in October 1950; the bank announced subsequently that it would not rediscount any paper except under emergency circumstances. Rediscounting of building loans was resumed in September 1951, on the understanding that the Government would take offsetting action in the monetary field if credit creation by the banks proved excessive.

An interesting example of rediscount ceilings combined with a selective rediscount policy is that of Mexico. With a view to influencing the composition of commercial banks' credit portfolios, the Bank of Mexico in 1948 established multiple rediscount rates, the lowest rates applying to credit documents representing agricultural loans and the highest ones to so-called nonproductive (or purely commercial) credit paper. At the same time rediscount privileges were restricted to those commercial banks maintaining at least 60 percent of their credit portfolio in productive loans.

5. Other Limits for Commercial Bank Lending

There are a few instances of other techniques for limiting commercial bank loans and advances. In some Central American countries, the central bank can prescribe minimum ratios that the capital and surplus of a commercial bank and of the whole banking system must bear to the volume of bank assets or to specific categories thereof. Such capital requirements against assets reinforced reserve requirements against deposits. In some Central American countries and in the Philippines, the central bank has authority to fix ceilings on the aggregate outstanding volume of loans, advances and investments of commercial banks, or to place limits on the rate of increase in the aggregate of such assets within specified future periods of time. Such ceilings or limits may also be applied to individual categories of loans, advances, and investments; to the extent this is done the controls are selective rather than general.

A particularly comprehensive example of over-all commercial bank credit ceilings is that in effect in Germany. In February 1951, when Germany's position in the European Payments Union was deteriorating rapidly, the central bank established a new set of "guiding principles" designed to reduce the over-all volume of commercial bank credits. Commercial banks were required to adjust their balances by applying a series of ratios of capital, cash, and other liquid assets to the amount of credits outstanding.[22] While these limits appeared as useful safeguards, they presumably proved inadequate to reverse the trends prevailing in February 1951, and the German authorities (as a supplement to drastic import controls and increased taxation) resorted to a direct reduction in the outstanding volume of commercial bank credit to business. Over a period of 2 or 3 months the banks were required to reduce such credit in accordance with quotas fixed for the various regions of Western Germany. The land central bank for each area apportioned the reduction among the commercial banks subject to its jurisdiction.

The field of general credit control includes two other instruments of considerable importance—open market operations of the monetary authorities and discount rate policies. Lack of information prevents examination of open market operations in foreign countries. The use of the discount rate as an instrument of general credit control is discussed at some length in a succeeding section. Postponement of this discussion until selective control mechanisms have been reviewed permits a more orderly development of the comparison between general and selective control devices.

SELECTIVE OR QUALITATIVE CREDIT CONTROLS

In addition to new forms of general credit control, the postwar period has also seen widespread extension of selective credit control

[22] More particularly, the total of short-term credits to business was not to exceed 20 times the commercial bank's capital and reserves; the total of the current credits and acceptance credits was not to exceed 70 percent of the deposits, capital, and reserves; the total volume of acceptance credits was not to exceed the bank's capital and reserves by more than the following ratios: in the case of foreign trade and harvest financing seven times, and in the other cases three times. The ratio of "liquid assets" to deposits was not to be less than 1 to 5, this last provision aiming at an improvement in the bank's liquidity. For this purpose "liquid assets" means cash, balances with the central bank, postal check balances, bills, and treasury bills.

mechanisms. In many of the European countries during the early postwar years, credit demands were forthcoming from all sectors of the economy for replenishing inventories, rebuilding damaged premises, reestablishing homes and commercial business and reconverting to peace-time production. A rapid fall in government expenditures was anticipated in many countries and a high level of private investment was desired in order to maintain total employment at a high level. Deflation was regarded by many to be more of a danger than inflation.

Under these conditions interest rates were generally kept at or near the levels which had prevailed during the war and other forms of quantitative control were sparingly used. Yet it was obvious that a shortage of goods would continue for a substantial period and that some form of credit control in selected areas would be useful to prevent speculative excesses and the hoarding of goods.

In the early postwar years, selective controls in most of the countries using them consisted of little more than a request to the commercial banks to refrain from extending credit which they had reason to believe would be used for speculative buying of commodity stocks, securities or real estate. The scope of such controls was gradually expanded; and by 1948, the criteria underlying selective credit control had generally become more stringent, and the specific instructions issued to the banking system had become more rigorous. Additional tightening of selective credit regulations occurred in several countries after the resurgence of inflationary pressures following the outbreak of hostilities in Korea.

Selective credit control has been most extensively used in the United Kingdom where it is the principal instrument for determining both the volume and direction of bank credit expansion. As early as May 1945, the commercial banks were requested by the authorities to abstain from large advances for the satisfaction of personal needs or for speculative buying or holding of securities or of commodity stocks. In December 1947, loans for the purchase of real property were officially discouraged and the banks were requested not to expand outstanding credit for the finance of hire-purchase (installment buying) of consumer goods. By April 1949, an important modification in the scope of the control was apparent when the authorities shifted from the practice of listing undesirable advances to the practice of asking that all credit extension be restricted with the exception of that for specified purposes.

The April 1949 directive indicated that special emphasis should be given to satisfying the needs of those borrowers interested in increasing exports to hard currency markets, expanding production in a manner which would reduce imports from hard currency sources, or improving technical procedures so as to bring about a fall in production costs. In October 1949, soon after the devaluation of sterling, the authorities emphasized that the banks were expected to take every possible step, when extending bank advances, to restrain inflationary tendencies. In April 1951, the banks were directed to give priority to the raising of capital for defense projects, exports and other vital home investments. The authorities reiterated in July 1951 the request that all bank advances should be made in accordance with the list of priorities announced in April and that the total level of bank advances should not be allowed to expand at a rate that threatened to produce inflationary consequences internally.

The almost exclusive reliance of the United Kingdom on selective or qualitative control of bank lending has been made possible by the fact that direction of banking activity is highly concentrated in the hands of less than a dozen major banks whose officials are in frequent contact with the Bank of England and whose traditions of cooperation with the monetary authorities are very strong. Physical controls in the form of building licenses and import controls supplement the selective control of bank credit.

A further instrument of credit control exists in the Capital Issues Committee which passes upon all new industrial issues in the London money market. Bank loans in excess of £50,000 (not made in the ordinary course of business of the borrower) must be submitted to the Capital Issues Committee and the banks are requested in extending industrial loans of any amount to apply the same principles which guide the Committee.

In other countries as well as in the United Kingdom, the principal emphasis has been placed on loans to export industries and to essential home market activities. In Sweden, simultaneously with the implementation in October 1950 of new legislation providing for cash and supplementary reserve requirements, the central bank and the commercial banks agreed informally to give preference to export and essential home market industries; credit is also to be made available for building operations approved under the official permits system.

In France where there had been no credit controls from 1945 to early 1947, reliance was at first placed exclusively on selective credit control. The commercial banks were instructed to grant new credits only where funds were required for essential business and could not be obtained by increased sales efforts, by liquidating superfluous assets or by recourse to the owner's personal resources or to the capital market. These restrictions were enforceable where necessary by refusal of the Bank of France to grant rediscount facilities. When quantitative credit controls were introduced in 1948, selective controls were retained with a view to channeling credit into priority uses.

The National Bank of Belgium pursues a selective credit policy by varying both rediscount rates and rules of eligibility for rediscountable paper according to the type of transaction covered. For example, rules of eligibility are generally much more liberal for paper covering essential imports than for that covering other imports. In times of a balance of payments deficit, rediscount rates for paper covering imports may be higher than the rates for export paper and the converse may apply when the balance of payments is in surplus.

Bank lending for capital purposes is discouraged in several countries, including Australia, New Zealand, and Canada. The objective is to force potential borrowers to raise capital from nonbanking sources. In Australia, banks have been asked to influence agricultural producers to reduce their bank indebtedness during periods of high agricultural income such as have recently existed. In New Zealand, bank loans and advances for investment purposes are discouraged, though loans to finance production and trade in raw materials are stated to be outside the scope of this selective credit mechanism at the present time. The chartered banks of Canada agreed with the Canadian authorities in February 1951 to refrain from making loans for capital purposes and from purchasing corporate securities with a term exceeding 1 year; certain small credits were excluded from the agreement.

Several countries require that bank advances to individual firms in excess of stipulated amounts shall be subject to prior approval by the authorities. The British mechanism has been mentioned above. In France any advance to individual firms in excess of 500 million francs or any advances by a bank which would bring total advances received and discounts obtained by any enterprise from all banks to an amount in excess of 500 million francs must be authorized by the Bank of France. Similarly, in the Netherlands, any advance over 50 thousand guilders was subject to prior approval by the central bank until December 1950; this feature of the Dutch credit control was eliminated in January 1951 when new general controls were established.

In some countries selective credit control is linked with the control of capital issues. As already noted, this is the case in Great Britain. In Australia, selective credit control is similarly linked, although much less directly. In 1946 the Netherlands central bank requested commercial banks and stockbrokers to consult with it prior to considering new capital issues. In Sweden, the commercial banks likewise agreed in 1950 not to take part in any new capital issues without prior consultation with the central bank.

There are, in foreign countries, but few instances of consumer, stock market, and real estate credit controls similar to those in effect in the United States. The lack of such restrictions is largely explained by the fact that these forms of credit are by no means as important abroad as in this country. Nevertheless, various consumer credit restrictions, generally less comprehensive than those in the United States, exist in Belgium, Canada, Great Britain, New Zealand, and Sweden; margin requirements on security loans are enforced in Canada; and various informal controls of real estate credit are exercised abroad by government-owned or government-controlled mortgage institutions. However, in Sweden and in Denmark, where building loans represent a sizeable portion of commercial bank lending, and in the United Kingdom, there are direct controls over residential building. In Denmark, the central bank ceased to rediscount building loans in 1950, but relaxed this policy in the fall of 1951.

Analysis of the results of selective credit control is rendered more difficult by the fact that these controls are frequently not spelled out in detail by legislation and are subject to modification and revision by informal arrangements between the monetary authorities and the commercial banks. Accordingly, the precise objectives of the selective credit controls in various countries at any given period are not always clear to the outside observer and the effectiveness of the controls accordingly cannot be accurately appraised. The most formalized system of selective credit control appears to be that operating in Australia. Control of bank lending had been temporarily established during the war and was put into permanent form in new central bank legislation in 1945. The Commonwealth Bank was given statutory power to determine policy in relation to bank advances—to give directions to the commercial banks as to the purposes for which advances may or may not be made. It cannot, however, give directions with respect to a specific advance to a particular person but must phrase its regulations to apply to general types of credit extension. Application of the policy to individual cases is left to the judgment of the commercial banks and only doubtful cases are referred to the Commonwealth Bank. Elsewhere the legislation appears to be distinctly less comprehensive and less specific. Among countries whose central banking legislation gives general authority for comprehensive credit controls are New Zealand, India, the Philippines, and a number of South American countries.

In Great Britain selective credit control regulation operates on an informal basis although the act nationalizing the Bank of England clearly gives sufficient statutory authority to the Treasury for the operation of controls of this type. The Chancellor of the Exchequer addresses his requests for the cooperation of the commercial banks through the Bank of England, and the Bank is the normal point of contact for any commercial bank seeking guidance on the detailed application of the general recommendations made by the Chancellor from time to time. Selective credit controls appear to be largely informal in Belgium, Sweden, and Switzerland. Consumer credit controls in Canada are based on statutory authority and are administered by the Ministry of Finance; security loan margin requirements appear to rest on voluntary acceptance by the commercial banks of proposals put forward by the Bank of Canada.

CHANGES IN DISCOUNT RATES

Changes in central bank discount rates, which were once regarded as a major instrument of monetary control, have played a less important role in the postwar years in most foreign countries. As suggested earlier, the immediate postwar conditions were believed in many foreign countries to call for ready availability of credit and for reliance upon direct controls and selective credit policies to prevent excessive inflationary developments in certain areas of the economy and to channel investment into high priority uses. Direct controls disintegrated or were abandoned at an early date in a number of countries, however, and inflation soon proved to be the greatest immediate threat. As open inflation gathered speed it was widely contended that no practicable increase in interest rates would serve as a brake on bank credit expansion since individuals and business would find ample opportunities for profitable employment of borrowed funds almost regardless of the rate of interest. As has been noted, the primary remedies chosen were those acting directly upon the availability of credit; selective controls were given wider scope and new forms of general quantitative control were introduced.

Belgium increased central bank discount rates as early as 1946 and France and Italy incorporated increased discount rates in their 1947–1948 efforts to halt excessive inflation. Changes in discount rates were not used extensively, however, until after the outbreak of the Korean hostilities when new inflationary pressures developed throughout the world. Under these conditions many countries, by increasing the cost of money, sought to supplement what was by then a complex system of selective and general credit controls. New kinds of general credit controls had increased the dependence of the commercial banks on the rediscounting facilities of the central bank and it was felt that increases in the rediscount rate would be rapidly transmitted to the credit structure and that dearer money would have the effect of reducing marginal demands for credit accommodation.

Among the countries which have increased discount rates since Korea are Austria, Canada, India, the Netherlands, the United Kingdom, Bolivia, Denmark, Western Germany, and Sweden. These increases represented the first postwar changes in either direction in Austria, Canada, India, the Netherlands, and the United Kingdom; Bolivia, Denmark, Western Germany, and Sweden had previously lowered their discount rates and the post-Korean actions represented the first postwar increases. There are, on the other hand, a number of countries which have not increased their discount rates since the Korean invasion, including Argentina, Brazil, Chile, Greece, Ireland, Italy, Mexico, New Zealand, Norway, Portugal, Spain, Switzerland, the Union of South Africa, and Turkey. Australia does not have a central bank rediscount rate, but the tap rate on Treasury bills has not been changed since 1949. Belgium and Finland, two of the countries which increased discount rates shortly after the outbreak of the Korean crisis, have since reduced their discount rates to pre-Korean levels.

The changes in central bank discount rates since June 24, 1950, for the more important countries that have increased their discount rates since the outbreak of the Korean crisis, are as follows:

Country	Date of change	New rate	Change from previous rate (percent)	Date of last change prior to June 24, 1950	Rate in July 1945 (percent)	Total number of changes since July 1, 1945
Austria	Dec. 6, 1951	5	+1½	Aug. 3, 1945	[1] 3½	1
Belgium	Sept. 11, 1950	3¾	+½	Oct. 6, 1949	1½	7
	July 5, 1951	3½	−¼			
	Sept. 13, 1951	3¼	−¼			
Bolivia	Sept. 30, 1950	6	+1	Feb. 4, 1948	6	2
Canada	Oct. 17, 1950	2	+½	Feb. 8, 1944	1½	1
Denmark	July 4, 1950	4½	+1	Jan. 1[illegible], 1946	4	3
	Nov. 2, 1950	5	+½			
Finland	Nov. 3, 1950	7¾	+2	July 1, 1949	4	7
	Dec. 16, 1951	5¾	−2			
France	Oct. 11, 1951	3	+½	June 8, 1950	1⅝	7
	Nov. 8, 1951	4	+1			
Western Germany [2]	Oct. 27, 1950	6	+2	July 19, 1949	[3] 5	3
India	Nov. 15, 1951	3½	+½	Nov. 28, 1935	3	1
Japan	Oct. 1, 1951	5.84	+0.73	July 5, 1948	3.29	4
Netherlands	Sept. 26, 1950	3	+½	June 27, 1941	2½	2
	April 17, 1951	4	+1			
Sweden	Dec. 1, 1950	3	+½	Feb. 9, 1945	2½	1
United Kingdom	Nov. 8, 1951	2½	+½	Oct. 26, 1939	2	1

[1] Rate adopted August 3, 1945.
[2] Land Central Banks.
[3] Rate adopted June 28, 1948.

With a few exceptions, such increases in the official discount rates as have occurred have been moderate. Belgium, Finland and France have made numerous changes, both upward and downward, in the discount rate since the end of the war.

In certain countries the effects of discount rate changes are largely psychological. This is particularly true where the commercial banks are in a sufficiently liquid position so that they do not normally have recourse to rediscounting with the central banks. For example, the chartered banks in Canada rarely require rediscount assistance from the central bank and the change in the latter's rediscount rate in

October 1950 may be presumed to have had primarily a psychological effect. An increase in the rate of interest on treasury bills and notes had already occurred in Canada when the rediscount rate was raised. Similarly, the increase in the Swedish discount rate in December 1950 appears to have represented an adjustment of the central bank rate to the higher yields already prevailing on the money market.

In countries where the commercial banks rely more heavily upon the rediscounting facilities of the central bank, a rise in the official discount rate has more direct effects upon interest rates in general, and the commercial banks tend to adjust rates charged on discounts, loans, and advances in accordance with changes in the central bank discount rate. It may be noted that in Belgium and Italy the first postwar increase in the official discount rate occurred simultaneously with the imposition of special reserve requirements which immobilized a large portion of commercial bank assets. The banks were thus forced to rely on the rediscount facilities of the central bank and the increase in the discount rate was promptly transmitted to the general interest rate structure. In France, on the other hand, the establishment of special reserve requirements was accompanied by a small reduction in the official discount rate. Nevertheless, the official rate remained distinctly higher than in the early postwar years while the central bank rediscount policy became more effective.

In the United Kingdom no change occurred in the official discount rate between October 1939 and November 1951. A rise in short-term commercial interest rates had taken place, however; a fairly sharp increase in the rate at which the commercial banks and discount houses were prepared to lend on commercial paper occurred in July 1951, presumably with the concurrence of the authorities. A further rise took place in November 1951 in conjunction with the increase in the Bank of England discount rate. The answer to Question 44 discusses in greater detail the recent changes in the interest-rate pattern.

Changes in discount rates may be expected to have an effect on long-term rates of interest for government and private securities in addition to their more immediate impact on short-term rates. Their effect on long-term rates is not fully predictable, however, as money market forces are constantly impinging upon various segments of the interest-rate structure even in relatively free money markets. In the presence of the numerous interferences with market forces represented by the types of controls previously discussed, it is even more difficult to trace the influence of short-term rates on the long-term rate structure.

It is clear, however, that long-term yields have increased in most countries since the end of the war and particularly since the outbreak of fighting in Korea. While most countries with highly developed money markets influence the course of long-term government bond yields by operations in the open market, through the central bank or the treasury or through the investment of funds accruing to various other government institutions, a stated policy of supporting long-term government bond prices has been the exception rather than the rule. Sweden followed a definite policy of support for long-term government securities until July 1950 after which time the yield on long-term government bonds was allowed to rise approximately one-half of 1 percent.

For a brief period in 1946 and 1947 the United Kingdom authorities under the so-called "cheaper money" drive operated in the government bond market in such a manner that the yield was driven down to a 2½-percent basis. This policy was discontinued early in 1947 and determination of long-term government interest rates has since been left largely to the influence of market forces. In November 1949, however, when the yield threatened to exceed 4 percent, the government interfered briefly in the market to prevent a further drop in long-term gilt-edged securities, putting the market on notice that a yield higher than 4 percent would be resisted. Fluctuations between that date and the raising of the Bank of England's discount rate in November 1951 were at slightly lower levels. Changes in the yields on long-term government securities in selected countries are shown in the table in the footnote.[23]

THE INSTITUTIONAL AND POLITICAL FRAMEWORK OF MONETARY POLICY

A comprehensive examination of foreign monetary experience would demand examination of many relevant questions beyond the scope of this reply. A few of the pertinent factors may be suggested: the economic and social objectives of the respective governments; the relative magnitudes of structural difficulties inherited from the war period, the support or lack of support which monetary policy has received from fiscal policy; the effect on the monetary picture of government programs involving heavy expenditures for housing or other investment, for subsidies, or for social security; the varying impact of external forces upon the monetary situation of the various countries.

It follows that it is difficult to appraise the monetary policy of a country without appearing to express judgments on its whole economic and social program. Such judgments are not implied in the following factual summaries of the monetary experience of various countries, which are designed to illustrate the manner in which political and social conditions in certain foreign countries influenced the choice of monetary policy.

[23] The long-term government bond yields in selected countries have been as follows:

Country	1945 average	1948 average	June 1950	September 1951
Great Britain	2.92	3.21	3.55	3.83
Belgium	4.01	4.75	4.35	4.61
Denmark	3.76	4.07	4.42	5.45
France	2.99	4.62	4.97	[a] 5.31
Italy	3.22	4.40	4.85	5.08
Netherlands	3.02	3.10	3.11	3.64
Norway	3.42	2.49	2.54	2.78
Sweden	3.04	3.08	3.02	3.20
Switzerland	3.29	3.42	2.57	2.99
Canada	3.06	2.94	2.73	3.26
Australia	3.25	3.14	3.15	[a] 3.82
New Zealand	3.18	3.03	3.10	3.08
India	3.10	2.97	3.00	3.46
Argentina	4.18	3.26	3.26	[b] 3.26
Brazil	5.43	7.17	[c] 6.67	[a] 7.24
Chile	8.31	8.33	8.33	8.33

[a] Figure for August 1951.
[b] Figure for July 1951.
[c] Figure for May 1950.

Source: International Financial Statistics, October 1951.

Because of profound differences in the environments in which the monetary authorities of each country are operating and the great variations in the banking structures through which they must work, a particular technique which may have worked well in one country may prove ineffective in another. For example, general and selective credit controls have played widely different roles in various countries.

In the United Kingdom and some of the Scandinavian countries, the postwar governments exercised a large measure of control over economic affairs. More particularly they adopted a comprehensive policy of diverting a substantial share of the national income to investment and of restraining personal consumption as a means to that end. The policies in such countries involved a considerable measure of direct control over prices, investment and foreign trade. These direct controls, coupled with vigorous fiscal policies, kept inflationary pressures under some degree of control.

Selective credit controls proved suitable under these circumstances and were extensively used, particularly in the United Kingdom. In that country pressures of latent inflation were gradually reduced. After devaluation in 1949 Britain attained over-all balance in its international accounts; this condition was maintained until the latter part of 1950 after the outbreak of the Korean hostilities.

Other Western European countries reestablished a relatively free economy, in some cases after a collapse of direct government controls and a run-away inflation, in other cases after an orderly relaxation or gradual removal of a rigid pattern of government controls. In these countries greater reliance was placed on monetary policy; the tasks set for monetary policy were particularly heavy since the governmental budgets of most of the countries in this group continued to show large deficits.

In France and Italy, general credit control devices were introduced only after both countries had experienced run-away inflation. When it appeared, in Italy in 1947 and in France in 1948, that despite the considerable rise in agricultural and industrial production, inflationary pressures continued to build up at a rapid rate, drastic quantitative credit restrictions were imposed for the first time in the monetary history of both countries. By restricting domestic spending, both France and Italy were gradually able to achieve by mid-1950 reasonable internal stability and a better international balance.

Belgium was the chief proponent of a third European pattern which was characterized by the use of monetary control policies coupled with relatively less detailed governmental planning than was used in most European countries. Monetary reform reduced the accumulation of purchasing power of the war and early postwar periods and froze a large share of that which remained. Money became "scarce" to a much greater degree than elsewhere in Europe and the monetary authorities were able to exercise substantial control over the total credit supply through varying interest rates and rediscount policies. The balance of payments position of Belgium was generally strong throughout the period.

In Germany, ever since the currency reform of mid-1948, monetary policy has also played a prominent role. In 1949, credit restrictions were relaxed; in the second part of 1950, however, a sharp increase in imports took place while bank credit remained easily available and import licenses were liberally granted. The demand for imports and Germany's consequent deficit with the European Payments Union were thus closely associated with large-scale domestic credit expansion. For this reason monetary restriction of a general character was one of the instruments used when Germany's external position greatly deteriorated toward the end of 1950. Drastic import restrictions were supported by a sharp increase in interest rates, a rise in cash reserve requirements, certain other credit control measures described earlier, and a generally higher tax program. These measures succeeded in bringing about a reversal in Germany's position within the European Payments Union in 1951.

In Sweden and in the Netherlands, where monetary controls had previously played a secondary role, interest rates were raised and quantitative credit restrictions were established in the latter part of 1950 and the beginning of 1951, respectively, when it became apparent that new inflationary pressures required some further restriction of total demand. In the Netherlands, along with a restrictive credit policy, the Government considerably reduced its investment program. These measures have assisted in the noticeable improvement of the Netherlands' position vis-a-vis the European Payments Union.

Nearly all the countries of Western Europe had thus made appreciable strides toward internal stability and international balance in the period preceding the renewed inflationary pressures brought into being by real and psychological effects of the outbreak of hostilities in Korea and the accelerated defense programs of the free world. That this progress occurred under widely varying monetary policies and economic programs suggests that monetary policies must be viewed in perspective as only one of several powerful influences at work during the period.

The recovery of physical production after the war proceeded by uneven steps as important bottlenecks were broken, an even flow of materials was reestablished, labor became trained in new activities, and pre-existing channels of trade were reopened. The increase in the supply of goods itself lessened the intensity of the competition for real resources, while changes in the distribution of the marginal income generated by the increased production reduced the relative share of effective consumer demand in many countries. To the extent that this was true, an important counter-inflationary force was present. A second major counter-inflationary force was the excess of imports over exports in most Western European countries. A large share of these net imports, which helped to close the gap between the total demand for goods and the home-produced supply, was financed by United States assistance. Against this background, monetary and fiscal policies played an important role in checking investment and consumption demand during the postwar years.

The new inflationary pressures which have developed in Western Europe since the outbreak of fighting in Korea may be attributed in part to the impact of rising world commodity prices and in part to more purely domestic forces. They have created new problems of excessive demand not essentially different from those of the earlier postwar period, and some retrogression in economic stability has resulted therefrom. An important difference in the economic position of the countries concerned, however, is that the levels of agricultural and industrial production are now far higher than they were in the earlier postwar years and in some instances higher than at any previous period. Restriction of total civilian demands, for both consumption and investment, will not be easy, but must be vigorously pressed in order to make room for new defense production.

CONCLUDING REMARKS

From the preceding survey three main conclusions emerge. First, as the rigid pattern of wartime controls has weakened, there has been increasing reliance on measures of monetary control. Secondly, these measures have been different both in scope and character from the simpler traditional controls of earlier periods. Thirdly, the particular combination of control measures used in any country has been largely determined by the political, economic and social problems faced and by the institutional arrangements prevailing. The following discussion will refer primarily to Western Europe.

I. Postwar Pattern of Monetary Control

If many individual variations are disregarded, it is possible to trace the postwar development of monetary control in Western Europe in the following broad sequence:

1. First came a period of generally easy money conditions to facilitate reconversion. Direct controls remaining from the war period and a widespread shortage of certain types of investment goods restrained total investment in the early postwar months.

2. As inflationary pressures developed, selective controls were adopted to prevent or minimize credit expansion in fields where speculative excesses threatened. These controls were soon broadened to restrict other nonessential lending.

3. As control of credit in selected fields proved inadequate to restrain inflation, general or quantitative controls were gradually established to restrict over-all credit expansion. Selective controls continued in operation, but they tended to be employed as a means of channeling credit into selected high-priority uses while the restrictive function was taken over by the general control techniques. The United Kingdom was an exception: here both functions were served by a selective control mechanism during the period prior to November 1951.

4. As part of general credit control measures, discount rate changes have recently become more frequent and short-term interest rates have generally hardened. In some countries long-term government bonds were permitted to fall in price.

This progression suggests that postwar monetary control abroad has relied upon a number of measures in combination rather than upon any single technique. With a few exceptions each new control has been applied on top of the pre-existing measures; the monetary effect has thus been cumulative and it is not possible to assess accurately the contribution of any single measure to the total result.

II. Increased Diversity and Complexity of Postwar Monetary Controls

The second principal conclusion from the survey is that the current monetary controls are broader in scope and more diverse in character than were the traditional monetary policies. In the first place, there have been numerous innovations in monetary techniques. Beginning with the middle thirties the establishment of, and modifications in, commercial bank cash reserve requirements became a fairly general central bank instrument. In the postwar years new reserve techniques have been developed in the form of special reserve requirements which stipulate various types of securities which the bank may hold as a part of compulsory reserves; differential reserve requirements have been introduced providing varying reserves against increases in deposits above a prescribed level; rediscount ceilings have been imposed applying, in some cases, to the rediscounts of individual banks as well as to the rediscounts of the commercial banking system as a whole; other over-all limits to commercial bank lending, such as ceilings on the aggregate volume of outstanding loans and investments, have been fixed in some countries. In addition, a great variety of selective regulations governing specific uses of credit have been devised and tested.

Secondly, there appears to have been less reliance on the use of interest-rate variations as an independent instrument of monetary policy. The survey indicates that the changes in discount rates were frequently made in conjunction with the establishment, or reinforcing, of quantitative credit restrictions. Furthermore, the rise in interest rates has, on the whole, been moderate although in almost all countries there has been an increase in the rates, either short-term or long-term, or both.

A third notable change in the nature of credit controls in foreign countries is the increased emphasis on selectivity, that is, on the discretionary allocation of credit in accordance with general criteria formulated by the monetary authorities. The selective or qualitative features seem to have permeated the monetary policy in many countries even where principal reliance is placed on quantitative credit controls.

While many foreign countries have abandoned direct controls over investment, they have, as a rule, retained selective credit controls within the wider framework of general controls. Sweden established informal selective controls simultaneously with the imposition of quantitative controls. The special reserve requirements in Mexico and elsewhere are framed to permit the monetary authorities to encourage specific types of loans and investments. Differential rediscount rates, as applied in Belgium, represent a qualitative or selective application of a general credit control technique. Supplementary and differential reserve requirements restrict to varying degrees the extent to which banking systems can generate new credit in response to private demand without the approval of the monetary authorities.

Certain observations may be made regarding the general nature and effectiveness of selective controls abroad. Foreign experience suggests that such controls are most appropriate when inflationary pressures are relatively moderate; the pressures may be moderate as a result of the existence of adequate resources to meet the major share of effective demands upon them, or they may be held in check by various direct controls and by anti-inflationary fiscal policies. If inflationary pressures become too strong, foreign experience indicates that selective controls may require the buttressing of general, quantitative credit control measures, or else, as in the United Kingdom, the broadening of the selective control mechanism to serve as a major quantitative control instrument.

A further general observation is that the selective control device as used in foreign countries appears to be developing as a method for channeling credit into high-priority uses. Applied in this way, selective controls abroad differ in scope from those used in this country. This survey suggests also that the selective control device has worked most successfully in countries where a high degree of cooperation existed between the monetary authorities and the commercial banking community and where the general economic objectives of the government enlisted the support of the bulk of the community.

III. Economic and Social Determinants of Monetary Policy

The third general conclusion emerging from this survey is that the particular combination of general and selective credit controls in operation in any country, and the manner in which these are coordinated with instruments of fiscal policy and with the broad economic policies of the government depends on the economic and social conditions prevailing in that country. The task assigned to monetary policy in foreign countries has differed greatly, depending upon the extent to which direct physical controls have been employed and upon the success with which the governments have managed their fiscal policies.

Balance of payments deficits for most of the Western European countries helped to restrain inflationary pressures and these deficits were financed in part by United States aid. Before the outbreak of hostilities in Korea, most of the Western European countries had shown considerable progress toward internal stability and balance of payments equilibrium. New inflationary pressures since that time have resulted in the loss of some of the ground previously won. Because prewar production levels have been equaled or surpassed, however, the countries of Western Europe are in a stronger position to meet new inflationary pressures than they were in the early postwar period.

One of the major tests of the efficacy of monetary policies in foreign countries may appropriately be the extent to which those policies, not in isolation, but in conjunction with fiscal policies, physical controls and all other economic programs of the governments concerned, contribute toward reducing reliance on foreign aid. A second criterion must be that of working toward a distribution of total available resources which will permit (1) the level of military preparation necessary to ensure the defense of the western world, (2) sufficient investment to give promise of continuing growth in the national product, and (3) a level of personal consumption adequate to secure popular support for these essential programs. Progress toward these goals cannot always be precisely measured, but there is little doubt that it has been uneven; a relevant factor in attempts at measurement is recognition that the countries of Western Europe entered the course with very unequal handicaps at the conclusion of the war.

44. Discuss and evaluate, as far as your available information permits, any devices used in foreign countries to insulate the market for Government securities from the private credit market.[24]

It has been pointed out in the answer to Question 39 that a number of suggestions have been made in order to insulate a portion of the public debt from the effects of restrictive credit policies.

The answer to Question 43 discusses two types of general credit control—the special reserve requirement and the differential reserve requirement—which may serve as devices for insulating the market for government securities from the private credit market. It should be noted, however, that the insulating function is only one of the characteristics of these types of credit control and was of secondary interest to many of the countries adopting such measures. In this reply the use of these controls will be further examined, principally with reference to Western Europe where well developed money markets exist. In addition, an example of effective insulation without the use of specific statutory devices will be discussed in connection with the postwar monetary experience of the United Kingdom.

The importance of insulating the market for government debt from the market for private debt depends largely upon the size, composition, and distribution of ownership of government securities. Of the seven countries of Western Europe where such insulation has been effected to some degree in recent years, only the United Kingdom, and to a lesser extent the Netherlands, have government debts whose size in relation to the country's national income is comparable to that of the United States. In Sweden, the fairly moderate government debt does not present major problems; in France and Italy run-away price inflation has very considerably reduced the burden of the debt; and in Belgium, where the gross government debt is comparatively small, a large portion of it was held in a nonmarketable form as a result of the postwar currency reform even before secondary reserve requirements were established in 1946.

1. Insulation by Means of Special Reserve Requirements

In Continental Western Europe, as pointed out in the reply to the preceding question, special reserve requirements, to be held partially or exclusively in government securities, were established during the postwar period by Belgium, France, Italy, the Netherlands, and Sweden. Creation of these additional reserve requirements served the monetary management objective of reducing the extent to which the banking system could independently expand credit on the basis of any given volume of deposits and reserves, forced the banks to rely more heavily upon central bank rediscounts, and accordingly, strengthened the hand of the monetary authority in controlling private credit. At the same time, the new requirements had the effect of insulating a portion of the government debt and to that extent eased the government's debt-management problems. Finally, it is also true that the same device assured the government of an automatic market for new issues of securities to the extent that the commercial banks were required to buy additional government securities in proportion to any increase in deposits; this was of some importance in one or two of the countries being discussed.

[24] The answer to this question was prepared on the basis of information available in November 1951.

It appears that the principal purpose and usefulness of the device varied from country to country and indeed that it may have changed within a single country over a period of time, depending upon the changing conditions that the authorities had to face. It may be pointed out that generally the special reserve requirement measures brought about no identifiable interest rate differential in favor of the portion of the government debt which was insulated. Available evidence suggests that it has done so only in the case of Belgium. As will be discussed in a following section, the United Kingdom accomplished this result without special reserve requirements as such.

The varying emphasis on the monetary and fiscal aspects of commercial bank special reserve requirements will appear more clearly from a brief survey of the actual experience of a number of countries.

Sweden.—The emphasis in Sweden appears to have been on monetary rather than on fiscal considerations. The special reserve requirements, consisting of both cash and government securities, were established in 1950 primarily as a measure of credit control (see the answer to Question 43). To a considerable extent, the additional reserves consisted of cash (including balances with the central bank); and the commercial banks found it necessary to sell treasury bills in order to comply with the new reserve requirements. Furthermore, the government debt in Sweden is of a relatively modest size, imposes no great burden on the budget and appears to be fairly firmly held in the hands of large banks and insurance companies. It is true that from 1945 to mid-1950 the authorities supported the government bond market; but it appears from official statements that they did so primarily with a view to ensuring that ample funds should be available, at low interest rates, to finance residential housing and thus to hold down the cost of living and wages. When in the middle of 1950 the decision was taken to abandon the wage controls, special reserve requirements were introduced and central bank support of government bonds was simultaneously discontinued. The net effect of these measures was a slight all-around increase in interest rates, although support of the government bond market was apparently resumed in 1951. It does not appear that insulation of the government security market from the market for private credit was a significant objective of the Swedish policy.

Belgium.—The government debt in Belgium at the end of the war was largely held by the central bank. A comprehensive currency reform, immediately after the liberation of the country, blocked a large proportion of the abundant liquid funds which were in the hands of the public and in the possession of the commercial banks. A large segment of these blocked funds was converted in 1945 into a nonmarketable loan bearing interest at 3½ percent; amortization was largely provided for from a capital levy and other special taxes imposed as an integral part of the reform.

It was not, therefore, the wartime debt that gave rise to difficulties in the postwar years. However, in the latter part of 1944 and in 1945, Belgium faced large emergency financing requirements in providing local currency for allied forces stationed in that country and for reconstruction expenditures. This in turn led to a steady increase in new government debt as short-term government securities were issued to raise the necessary funds. As private financing needs revived in

1945, the commercial banks began to sell these securities to the central bank in order to increase their loanable funds.

It was to prevent the rapid monetization of this new debt that Belgium for the first time established reserve requirements on bank deposits early in 1946. These were in the form of special reserve requirements and represented the first formal regulation of this type in any Western European country. The requirement calls for compulsory reserves equal to 60 percent of deposit liabilities; and four-fifths of these must be held in the form of specially issued treasury bills. The Belgian government has thus been able to institute a tight money market for private credit and at the same time to keep a portion of its governmental debt insulated from the effects of its restrictive credit policies; in addition, the interest rate on the insulated debt has been kept at the relatively low rate of $1\frac{5}{16}$ percent.

France and Italy.—No comprehensve currency reforms were effected in either France or Italy after the war and open inflation ultimately reduced the real burden of the government debt to a considerable extent; in France the burden is among the lowest in the world. In order to arrest inflation, both countries finally took drastic measures to stop indiscriminate credit expansion to private business and to secure the financing of government deficits from sources other than direct central bank advances to the treasury. With this dual objective in mind, both countries adopted reserve requirements on bank deposits for the first time (see the answer to Question 43). These requirements, which took the form of special reserves, limited private credit expansion both by establishing required reserve ratios larger than the customary reserves previously held, and by preventing the sale of bank-held government securities. At the same time the new requirements provided a channel through which the treasuries could be certain of obtaining new funds as increases in bank deposits were necessarily matched in part by an increase in holdings of government securities.

Western Germany.—The domestic debt of the former Reich Government was largely wiped out by the currency reform of 1948; and the debt of the new Federal and Land Governments now consists almost exclusively of the so-called "equalization claims" which were allocated to the banking system under the currency reform and are practically nonmarketable; there are also some direct advances by the central banking system. Monetary policy in Germany, with its rapid and substantial interest rate changes in recent years, therefore operates under very special conditions.

The Netherlands.—The government debt of the Netherlands is larger in terms of the national income than the debts of other continental Western European countries and is held to a considerable extent by the commercial banks. Until recently the Netherlands relied extensively on direct controls, rationing, and subsidies to hold in check inflationary pressures arising from a high level of investment. Since the latter part of 1950 renewed emphasis has been placed on monetary controls, and comprehensive commercial bank reserve requirements were established in January 1951 (see the answer to Question 43). Under these requirements, a large part of the commercial banks' treasury bill holdings have been immobilized and can no longer be sold in order to provide funds for increased loans to business. An all-around increase in interest rates has occurred, however, and there appears to be no evidence that government interest rates are any different from what they would have been if a portion of its debt had not been locked up as bank reserves.

2. Insulation by Informal Agreement

In the United Kingdom, insulation of the market for short-term government securities both from the market for short-term private credit and from the long-term market, government and private, is not accomplished by statutory regulation or specific devices of the type discussed in the preceding section. It is brought about, in accordance with traditional British money market practices, by various broad arrangements among the monetary authorities, the discount market, and the commercial banks.

As part of the "cheaper money" drive in the early postwar period, the British authorities arbitrarily reduced the rates paid by the government for short-term borrowing against treasury bills and treasury deposit receipts. Rates on these instruments were reduced respectively to one-half of 1 percent and five-eighths of 1 percent from the previous level of 1 percent and 1⅛ percent which had been maintained during the war period. By a combination of measures the government had also driven the long-term rate of interest on government securities down to 2½ percent. During this period, both long-term and short-term commercial rates moved in sympathy with the rates for government securities and no particular insulation of the two markets was apparent.

When the drive for cheaper money was abandoned in early 1947, long-term interest rates began an upward climb and within a relatively brief period were fluctuating between 3½ and 4 percent, with government and private long-term securities moving more or less together. During most of this period, however, short-term private rates moved up only very slightly; they remained at a level generally consistent with the stable short-term government rates until the summer of 1951, when private rates were appreciably increased. The rate for 3-month fine trade bills, for example, which had been in the range 1–1½ percent in October 1945 stood in the range 1¾–2½ percent in July 1951. The sharp rise in private rates while government short-term rates remained stable called attention to the effective insulation of the two markets. A further rise in short-term commercial rates occurred in November 1951 (see below) when short-term government rates also moved upward, though to a smaller extent.

The then Chancellor of the Exchequer indicated in mid-1951 that he was not opposed to an increase in private short-term interest rates but that he was unwilling to accept an increase in the cost of short-term money to the government. He suggested that a rise in treasury bill rates would have no appreciable effect on the volume of credit outstanding and stated that: "* * * the Clearing Banks have for many years accepted that, in matters of credit policy, it is their duty to cooperate with the government." The tradition which decrees that the London money market shall give first priority to the financing needs of the government is the more easily maintained and enforced because of the fact that only a limited number of large financial institutions are closely involved in the market. The cooperation of the commercial banks and of the discount houses is presumably freely given to the government though there are known to be institutional relationships and legal powers through which the government could enforce the tradition if necessary.

The particular techniques which account for the insulation of the government short-term market cannot be fully discussed in the space available. Efficient technical operation of the London money market, which has been worked out over many years, insures that excess cash resources of the banking system may be promptly mobilized for investment in short-term government paper to any extent demanded by the cash requirements of the government. Under conditions which had existed during and since the war the treasury bill was a completely liquid asset in the hands of the discount market or the commercial banks. At any time of cash stringency, institutions of either class could approach the "special buyer", a broker representing the Bank of England, and could convert treasury bills into cash without incurring a loss. There was accordingly no hesitancy on the part of the banking community to keep liquid funds fully employed in these instruments and any increase in liquidity of the banking system was accordingly quickly transformed into an increased demand for government short-term paper.

Re-enforcing the technical flexibility of the London money market system as a means of assuring that government finances would be available at the price set by the government was the system of qualitative control of bank lending to the private sector which was outlined in the answer to Question 43. Underlying this qualitative control of private borrowing, in turn, was a government fiscal policy which sought to insure that the total investment expenditures of the country, both public and private, should be kept within limits established by broad government programs.

In November 1951, the new British Government approved an increase in the official discount rate of the Bank of England from 2 percent to 2½ percent, the first change in the bank rate since 1939. Commercial banks promptly raised discount rates for short-term commercial paper by one-half of 1 percent. The rate for call money (short-term accommodation) against commercial bills was raised by the same amount while that for call money against treasury bills was increased by only one-fourth of 1 percent. The latter increase dictated lower bids for treasury bills on the part of the discount houses which handle the bulk of their treasury bill holdings with money borrowed from the commercial banks. At the first treasury bill tender subsequent to the change in bank rate, the discount market bid represented an interest rate basis of approximately seven-eighths of 1 percent as against the earlier rate of just over one-half of 1 percent. Continuance of an interest rate differential in favor of government short-term paper appeared to be indicated also in the announcement that the Bank of England would make 7-day loans against treasury bills at a 2 percent rate rather than at the bank rate.

As this reply is being prepared in mid-November, it is not possible to make any firm statements regarding the changes that may be expected in the operating techniques of the London money market as a result of what the new Chancellor of the Exchequer has called the "clear change of emphasis" introduced by his policy. It is generally expected in London that the commercial banks and discount houses may no longer rely upon automatic purchases of treasury bills by the special buyer at the request of the money market and that the monetary authorities will henceforth take the initiative in supplying or withholding cash through this channel. The market may accordingly, from time to time, be forced to resort to borrowing from the central bank and the bank rate may again become an effective rate for influencing both the cost and the supply of commercial bank credit to the public.

3. Other Forms of Insulation

Broadly speaking, monetary conditions in most foreign countries outside of Western Europe bear little resemblance to those in the United States. In most of the smaller underdeveloped countries in Latin America and Asia there are no active open markets for fixed interest securities. The credit needs of the governments of such countries have generally been satisfied by the central banks, either by loans or by purchase of security issues. Some small quantities of government securities in those countries may be involuntarily held by private entities who were paid in bonds instead of cash, but voluntary private purchases of such securities are exceptional. In a few cases the private banks also hold appreciable quantities of government securities, but this is not likely to occur without some special inducement such as the optional or obligatory use of such securities to satisfy a reserve requirement. Private securities, in contrast, are usually not held in large quantities by the central banks of the underdeveloped countries. The sources of private credit are chiefly commercial banks, which make loans to businesses and individuals but do not customarily hold many securities, either public or private. In summary, the markets for securities and loans in some of the underdeveloped countries are generally so limited that the market for government securities is in effect insulated from the market for private securities without the use of any special devices and without any official desire for this state of affairs.

The basic reason for resort to a special, insulated market for government bonds (i. e., the central bank) in these circumstances has been the absence of adequate money and capital markets in these countries. The result has frequently been to establish an interest rate pattern for government securities well below the prevailing interest rates on private loans and securities. This has occurred also in some of the larger primary producing countries, where more or less active security markets do exist, but where the interest rates or market yields on governmental issues tend to be lower, largely because of central bank intervention, than those on private issues.

4. Conclusion

Insulation of the market for government securities from the market for private credit may be said to exist to the extent that legal reserve requirements expressed in government securities provide a protected market for a portion of the government debt. In at least one country, however, effective insulation has been established without the use of formal reserve requirements. The purposes and the effects of insulation vary from country to country.

In most instances such insulation appears to have come about merely as a byproduct of reserve increases designed to reduce the liquidity of the commercial banking system. In some countries the extent to which the commercial banks are required to hold government securities suggests that a second purpose of the monetary authorities was to immobilize a portion of the public debt in order to ease debt management operations and avoid difficult refunding problems. A third objective appears to have been served in some countries inasmuch as special reserve requirements expressed as ratios of deposit liabilities involve an automatic market for new government issues during periods when deposits are rising; differential reserve requirements, calling for particularly large holdings of government securities as reserves against increases in deposits over a base period, are even more effective devices for assuring a continuing demand for government securities under similar conditions.

Insulation of a portion of the government debt has resulted in an identifiable interest rate differential in favor of government securities in only two of the Western European countries. Only in the United Kingdom has establishment of such a differential appeared to be a primary aim of insulation. There the interest rate differential can be attributed not to formal reserve requirements but to full cooperation of the banking system with the monetary authorities and concurrence of the former with the government's desire to maintain a low rate on its short-term borrowing. "Moral suasion" is an effective weapon of control in the United Kingdom because of the small number of major institutions in the money market and the strong tradition that the requirements of government finance should be given priority. In addition direct controls reduce the demands for private credit. A change of emphasis occurred in the United Kingdom in November 1951 when the bank rate was raised but it is too early to judge how the new policy will differ from the old.

As the two preceding answers have suggested, the wide variety of institutional arrangements and of underlying economic conditions which characterize the countries studied and which form the complex background for their monetary measures, makes it inappropriate and hazardous to attempt to draw valid conclusions for monetary policies in the United States from the experience of foreign countries. Study of their experience can prove useful only as a limited guide in appraising new suggestions for domestic policies.

APPENDIX

Questions Addressed to the Secretary of the Treasury

A. CONGRESSIONAL POLICY DIRECTIVES

1. State, citing the appropriate statutes, all of the policy directives bearing upon economic objectives which have been given by Congress to the Treasury Department as a guide to the use of the powers entrusted to it.

2. State the general economic objectives which the Treasury Department seeks to further through the use of the powers which have been given to it by Congress. Emphasize particularly the over-all objectives of the Treasury Department in managing the public debt.

3. Do you believe that the congressional declaration of policy contained in the Employment Act of 1946, which reads as follows:

> The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs

and obligations and other essential considerations of national policy, with the assistance and cooperation of industry, agriculture, labor, and State and local governments, 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.

is balanced in its emphasis upon high-level employment and price stability respectively, as objectives of Federal Government policy? Suggest any changes by which you think it might be improved.

4. Do you believe that a broad directive with respect to economic policy should be given to the Treasury Department by Congress? If so, state the general character of the directive which you would recommend. If you believe there should be no such directive, state your reasons for this belief.

B. POLICY FORMULATION IN THE EXECUTIVE BRANCH

5. What are the present powers of the Treasury Department, if any, with respect to the operations of the Federal lending agencies, such as the Reconstruction Finance Corporation, the Federal Housing Administration, and including also the Federal Deposit Insurance Corporation? Enumerate these powers, stating in each case their basis in statute, Executive order, or otherwise.

6. What additional authority of the Treasury Department with respect to the Federal Deposit Insurance Corporation and the Federal lending agencies would you consider desirable? If you do not believe that additional authority of the Treasury Department with respect to these agencies is desirable, what, if any, additional means of coordinating their activities would you recommend?

7. Can any policy conflict between the Treasury and the Federal Deposit Insurance Corporation or the lending agencies be resolved in the last resort by the President? If not, what are the exceptions? Do you believe that the President should have (or under the Constitution *does* have) authority to resolve all such conflicts?

8. What are the present powers of the Treasury Department, if any, with respect to the operations of the Federal Reserve System?

9. What provision, if any, is there for resolving policy conflicts between the Treasury (or other agencies of the executive branch) and the Federal Reserve System? Do you believe that this power should lie with the President (or already does under the Constitution)?

10. If you do not believe that the President should (or does) have such power, how, in your opinion, should policy conflicts be resolved? Is it necessary that they be resolved or could the agencies directly responsible to the President, on the one hand, and the Federal Reserve System, on the other, pursue conflicting policies indefinitely?

C. EXPENSES FOR THE PURPOSE OF INFLUENCING PUBLIC OPINION

11. List and discuss any expenses which have been incurred by the Treasury during the period since 1946 for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and the management of the public debt. Expenses for the preparation of material in standard expository format and

for the distribution or presentation of such material in written or oral form to persons who might be expected to have a regular business or professional interest in it may be omitted. Any expenses during this period for the preparation of motion pictures, illustrated brochures, or any other special material in these fields should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the subcommittee may, if it desires, consider them on a case-by-case basis.

D. CREDIT AND DEBT MANAGEMENT POLICY

12. Leaving aside the matter of debt management completely, what are the various powers of the Treasury with regard to monetary matters? Explain the legal background and describe how the Treasury has used these powers.

13. Describe the Treasury's functions with respect to the handling of incoming gold and silver, and how bank reserves are affected. Explain how the Treasury may permit gold to be "sterilized."

14. Describe fully how the handling of Treasury deposits influences the monetary situation.

15. In making decisions with regard to these Treasury monetary matters (gold, silver, and handling of its deposits), has the Treasury attempted to coordinate its policies with those of the Federal Reserve System?

16. Review the development of legislative authority on public-debt matters over the years.

17. Describe fully the issues involved in policy discussions between the Treasury and the Federal Reserve System from the end of the war until the "accord" announced by these agencies on March 4, 1951. What were the areas of agreement and the areas of disagreement and how did they change over time during this period?

18. Describe the nature of the accord between the Treasury and the Federal Reserve System which was announced by them on March 4, 1951.

19. Have there been fundamental differences of *economic objectives* between the Treasury and the Federal Reserve System since the time you became Secretary of the Treasury and, if so, what have they been?

20. Except as previously described, what differences with respect to procedures and techniques have arisen between the Treasury and the Federal Reserve System since you became Secretary, or earlier?

21. How closely have the Treasury and the Federal Reserve System cooperated in matters of common interest?

22. Describe the mechanism by which a general tightening or easing of credit, and the changes in interest rates which may result, is expected to counteract inflation or deflation. Discuss the impact on borrowers and lenders in both the short-term and long-term credit markets and on spending and savings. Indicate the effect on each of the broad categories of spending entering into gross national product. What are the (actual or potential) capital losses or gains that would be brought about by changes in interest rates? To what extent is the effectiveness of a program of credit restraint affected by or dependent upon expectations with respect to subsequent changes in interest rates? Distinguish in your discussion between small changes in rates and large changes in rates.

23. Evaluate the effectiveness of a general tightening of credit (and the consequent increase in interest rates) in restraining inflation as compared with other factors (*a*) when the principal threat of inflation comes from an increase in private business activity; (*b*) when the principal threat of inflation comes from increased expenditures by the Federal Government.

24. Discuss the appropriate role of general credit controls and of selective credit controls under each of the hypotheses mentioned in the preceding question. What selective controls do you consider appropriate under present circumstances?

25. Do you consider that the current extensive use of Government controls over private construction and over private ability to buy scarce materials has an important bearing upon the effectiveness and appropriateness of general credit controls under present circumstances?

26. To what extent is the demand for Government securities by nonbank investors determined by (*a*) the level of interest rates, (*b*) expectations with respect to changes in interest rates, (*c*) other factors?

27. What advantages do you see in a stable long-term Government bond market? What weight should be given to the desirability of stability in the Government bond market in determining credit policy (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future; (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future; (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future; (*d*) under conditions of total war?

28. Has the Treasury Department ever taken action on its own initiative or in cooperation with the Federal Reserve System to change the level of interest rates on Government securities, or to prevent a change in interest rates which would have otherwise occurred? Give examples—if possible, of actions operating in each direction.

29. Please explain your position regarding the importance of interest on the public debt as a budgetary cost.

30. Has the growth of the public debt changed the nature of the methods which can be prudently used by the Federal Reserve System with respect to monetary and credit policy?

31. Have there been important economic changes since 1913 which affect the efficiency and appropriateness of tradional Federal Reserve System operations?

32. To what extent does the choice of maturities of new and refunding issues of Treasury securities enable you to influence the money and investment markets?

33. In your opinion is it possible to separate decisions with respect to interest rates from the decisions regarding timing, amounts of offerings to different sectors of the market, designing of securities for various investor classes, and similar considerations?

34. Do you believe that a rise in the average annual yield of series E savings bonds to 3½ percent, or thereabouts, would significantly increase the amounts sold and diminish the amounts of early redemptions?

35. Discuss the advantages and disadvantages of requiring (*a*) all member banks or (*b*) all insured banks to maintain secondary reserves

(in addition to present reserves) in the form of United States securities, either present issues or special types.

36. Discuss the advantages and disadvantages generally of maintaining bank reserves against classes of *assets* rather than against classes of liabilities as at present.

37. Discuss the advantages and disadvantages of marketable and nonmarketable securities (*a*) under present conditions; (*b*) in the event of the necessity for substantial net Government borrowing.

38. What new types of securities, if any, do you believe should be given consideration for use (*a*) under present conditions; (*b*) in the event of the necessity for substantial net Government borrowing? Give the merits and demerits.

39. Are there any ways other than those implied in the answers to the preceding questions for insulating public debt securities from the impact of restrictive credit policies designed primarily to discourage the growth of private debt?

40. Under what conditions, if any, do you believe it would be desirable to resort to compulsory methods in the sale of Government securities to (*a*) banks, (*b*) other financial institutions, (*c*) other corporations, (*d*) individuals? Discuss the philosophy which underlies your views on this matter.

41. Discuss the merits and demerits of the proposal for the issuance of a bond, the value of which would be guaranteed in terms of purchasing power.

E. INTERNATIONAL COMPARISONS

42. Discuss and evaluate, as far as your available information permits, the relationship between the Executive, the Treasury, and the Central Bank in foreign countries. Place particular emphasis on the resolution of policy conflicts.

43. Discuss and evaluate, as far as your available information permits, the relative use of selective and general credit controls in foreign countries.

44. Discuss and evaluate, as far as your available information permits, any devices used in foreign countries to insulate the market for Government securities from the private credit market.

Treasury Management Improvement Program

(Referred to on p. 208 in the answer to Question 2)

One of the first steps I took after assuming office as Secretary of the Treasury in June of 1946 was to adopt a Department-wide management improvement program designed to increase the efficiency of working operations and methods throughout the entire Treasury Department. Intensive management studies have been carried on within the Department and management surveys have been made by private management engineering firms.

In the approach to management improvement considerable emphasis has been placed on encouraging employee participation through awards for suggestions and work simplification programs.

There are many examples of management improvements and procedural changes which could be highlighted. However, I consider the management improvement program of the Treasury Department such an important part of the Treasury's over-all responsibility that I am therefore attaching a copy of my July 31, 1951, letter to the Honorable Frank M. Karsten, Chairman, Public Accounts Subcommittee, Committee on Expenditures in the Executive Departments of the House of Representatives, which covers in considerable detail the factual record of the Treasury's management improvement program. You will note that the letter and the summary of principal workload factors, personnel and operating expenditures cover, for comparison purposes, the fiscal years 1930, 1940, 1946, and 1950. Other exhibits referred to in the letter will be made available to the Committee upon request.

THE SECRETARY OF THE TREASURY,
Washington, July 31, 1951.

MY DEAR MR. CHAIRMAN:

I am glad to comply with the request of your letter of April 20, 1951, for an informative statement on the nature of the operations of the Treasury Department and on the funds which are required for carrying them out.

Let me state at the outset that the objective which you note of assembling information which will show the American taxpayer just what he receives for his money is one with which I have been in the heartiest agreement ever since I took office as Secretary of the Treasury in June 1946. Under my direction, important measures have been taken during these 5 years to improve and modernize departmental operations from the point of view of increasing the business efficiency of the organization and from the point of view of reducing operating costs wherever possible. In carrying out this program, I have had the full support of all officials and employees of the Treasury; and I might add that I have taken every occasion to promote a greater public understanding of the spirit of loyal and efficient service which animates the vast majority of the administrative and other employees of the Government with whom I have come in contact.

It is my belief that those of us engaged in the great task of Government operation have been far too hesitant in putting the organizational achievements of modern public service before the citizens of the nation. We in the Treasury have a real story to tell—a story of vastly increased services performed at minimum cost; a story of improvements in procedures and administrative techniques fully in line with the highest standards of modern business and accounting practices; and a story of exceptional performance on the part of large numbers of individual employees far exceeding the stated requirements relating to the various Government positions. The story of the past 5 years, in particular, is one of steady and in many cases, spectacular improvement in the operating practices of the Department and in the quality of service rendered the public.

I am most appreciative of the opportunity which your letter has given me for putting our record before you. I am submitting with this letter, among other data, a general account in chart and table form of the changes in our activities and in the amount of funds and number of personnel required for discharging them in the two decades since 1930. This study, I believe, will be of particular interest for reference purposes, since it notes each organizational change of the past two decades, together with the statutory or other authority under which it was made. The changing organizational pattern which emerges from the record reflects the steady progress of the Department in streamlining the services with which it is charged by law, in order to make these services fully responsive to national requirements during one of the most dynamic periods in the life of the nation.

No presentation of facts with respect to changing governmental functions during the past 20 years can be fully appreciated, however, unless it is viewed against the backdrop of the broad changes affecting such functions which have been occurring in our national life during this period. These changes are twofold: those which arise out of the economic and social growth taking place within the borders of our own country, and those which come from the impact on our nation of events in the international area. One of the great strengths of our constitutional system of government is its responsiveness to the needs and requirements of a growing, dynamic economy. In the Treasury Department, this responsiveness has been reflected in far-reaching changes both in organization and in the volume and direction of operating activities.

Since the factual record is shown in some detail in the attached exhibits, I shall attempt in this letter to give only the highlights of the most important changes in organization and activities; and to indicate in broad terms how these changes are related to the performance by the Treasury Department of its historic responsibilities in the light of modern conditions.

From 1930 to 1940 the total operating expenditures for the Department decreased from $190,102,706 to $177,165,753, representing a net reduction of 6.8

percent. Notwithstanding this reduction in expenditures, a substantial increase occurred in the functions and responsibilities imposed on the Department as well as an over-all increase in the workload. During the period concerned, there was transferred from the Department the budget function, which later evolved into the Bureau of the Budget as we now know it, the Public Health Service, the Office of Supervising Architect and the Federal Farm Loan Board and Bureau. Substantial increases in functions and workload occurred as follows:

1. The number of tax returns filed increased from 5,912,907 to 19,199,932. Additional tax assessments amounting to $94 million more in 1940 than in 1930 reflects the increased enforcement activity during the period.
2. Printing of currency, stamps and other documents increased from 338,541,969 to 446,846,250 sheets.
3. Manufacture of coins increased from 399,467,200 to 768,091,000.
4. Government checks paid increased from 33,192,836 to 130,578,489.
5. Pieces of currency redeemed increased from 327,000,000 to 1,197,000,000.
6. Public Debt securities outstanding requiring servicing increased from 12,132,324 pieces to 25,009,543 pieces.
7. Principal new activities assigned were:
   (*a*) establishment of centralized accounting and disbursing activities;
   (*b*) administration of narcotic laws:
   (*c*) establishment of the savings bonds program;
   (*d*) transfer of legal functions relating to Treasury activities from Justice Department resulting in establishment of the Office of the General Counsel and legal staffs in appropriate bureaus;
   (*e*) collections of new taxes such as social security, excise, alcohol and coal;
   (*f*) assignment to the Coast Guard of responsibility for enforcement of all federal laws on board vessels upon the high seas and navigable waters of the United States.

From 1940 to 1950 the Department's operating expenditures increased from $177,165,753 to $507,627,885. During this period, the Department was relieved of only two substantial activities, i.e., the emergency relief accounting and disbursing organization was liquidated and the Bureau of Federal Supply was transferred to General Services Administration. The operating expenditures of these activities in 1940 were $9,010,926 and $11,832,035, respectively. The large increase in expenditures from 1940 to 1950 was due primarily to enormous workload increases in principal activities, general salary increases authorized by law, increase in the general level of prices, and to the assignment of new responsibilities as indicated below.

1. General civilian salary increases and military pay, allowance and retirement increases authorized by law constitute a large portion of the increased operating costs. Published estimates indicate that average Government-wide salary increases for classified employees has amounted to 54.6 percent. It is estimated that approximately $154 million of the Department's total operating expenditures in 1950 may be attributed to such increases affecting both civilian and military personnel.
2. The costs of supplies, equipment, transportation, communications, printing and binding, and other non-personal service costs have increased sharply as indicated by the rise in the general price index.
3. The Bureau of Internal Revenue represents approximately 44 percent of the total requirements of the Department, accounting for $226.9 million of the $507.6 million expended in 1950. In keeping with the tremendous increase in tax returns filed from 19 million to 89 million, the Bureau's requirements increased $164 million, including the cost of pay increases, over the 1940 expenditures. Additional tax assessments likewise increased by $1,353 billion in the same period due to intensification of enforcement activities.
4. Printing of currency, stamps and other documents increased from 446,846,250 to 729,297,594 sheets, and the expenditures therefor increased from $8,576,052 to $15,967,235, including the cost of general pay increases.
5. Customs entries increased from 725,624 to 1,269,981 and the number of persons entering the United States rose from 48,552,327 to 87,000,000. Operating expenditures for Customs activities increased correspondingly from $20,816,687 to $35,327,585, including the cost of general pay increases.
6. Fiscal activities, including accounting, disbursing, check payment, public debt, currency redemption and related operations, were consolidated into a single organizational component through the establishment of the Fiscal Service. This Service has been assigned new operations and has had tremendous increases

in workload since 1940. The principal new operations and workload increases from 1940 to 1950 are:

(a) Functioning of 4,481,451 depositary receipts in 1950 under tax withholding procedures not in effect in 1940.

(b) Issuance of 8,728,509 interest checks for series G bonds. The first series G bonds were issued in 1941.

(c) Checks issued through the centralized disbursing operations increased from 106,743,925 to 189,736,578 and checks paid increased from 130,578,489 to 269,320,659, despite liquidation of Emergency Relief activities.

(d) Savings bonds issues increased from 4,752,000 pieces to 67,891,478 pieces and retirements increased from 807,000 to 84,952,771. Retirements include bonds issued in 1950 and prior years.

(e) Outstanding public debt securities requiring servicing increased from 25,009,543 pieces to 526,193,866 pieces.

(f) Currency redeemed increased from 1,197,000,000 pieces to 1,788,000,000 pieces.

Operating expenditures of the Fiscal Service increased from $20,293,561 to $68,423,702, or a net increase of $48,130,141, including the cost of general pay increases. Of this total increase of $48 million, approximately $41 million is expended annually for administering the savings bonds program involving many millions of savers who own over 500 million of the bonds outstanding.

7. During the period 1940 to 1950 expenditures of the U. S. Coast Guard increased from $44,753,263 to $149,191,232. During this period the Merchant Marine Inspection was transferred to Treasury from the Commerce Department. The same period witnessed the transfer of the Coast Guard to the Navy during the war, and the re-transfer to the Treasury at the cessation of hostilities, with important new responsibilities largely growing out of the war. These new functions include the operation of ocean stations for weather and other services, and the establishment and operation of new aids to navigation, including loran stations. The above transfers of functions and the new responsibilities largely explain the increase in the personnel for the Coast Guard in the period concerned. Higher operating costs have resulted from the adoption of new shipboard electronic devices, including radar, loran, ultra high frequency communication equipments and sonar detection devices.

General pay increases authorized for Coast Guard personnel amounted to approximately 50% for officers and approximately 60% for petty officers. The basic pay of lowest grade enlisted men was increased from $21.00 to $75.00, or approximately 257%. In addition, increases were granted for clothing, subsistence and family allowances. During this same period, the retired list increased from 1,740 to 6,037, representing an increase of 247%, while the dollar costs due to increase in pensions amounted to 541%.

In addition to the far-reaching changes in the operations of the Treasury Department as a result of the increase in the public debt and the necessity for a greatly expanded revenue system, the Department has been strongly affected by the new position of the United States in world affairs since the pre-World War II period. Our new responsibilities in this area have meant greatly increased duties on the part of the Treasury with respect to the international lending policies of the United States, the framing of policy with respect to international exchange and monetary matters, the operation of the United States Stabilization Fund. Under the provisions of the Bretton Woods Agreements Act, the Secretary of the Treasury was given the additional responsibility of serving as chairman of the National Advisory Council which was established to coordinate the policies and operations of the representatives of the United States on the International Monetary Fund and the International Bank for Reconstruction and Development, the Export-Import Bank, and all other agencies of the Government which participate in the making of foreign loans or engage in foreign financial exchange or monetary transactions.

I have attempted, up to this point, to give a brief account of some of the major current activities of the Treasury Department and to show how these activities have been shaped—within the framework of responsibilities delegated to the Department—by changes in our economy and in our national life during recent years. In the course of this account, I have necessarily omitted reference to many of the continuing functions of the Department having to do with the day-to-day financial life of the Government and of the Nation.

To mention only one development affecting important services performed by the Treasury Department: coin and currency in circulation outside of banks has increased from $3.4 billion in 1930 to about $25 billion at the present time. The increased services required of the Treasury Department as a result of these and other changes in our financial life have been accomplished, as the attached material shows, at a relatively small increased over-all cost, as compared with the amounts required in 1940 and in 1930. Moreover, since the close of World War II, it has been found possible in many instances to perform the financial service operations of the Treasury at a higher level of efficiency and at a lower cost to the taxpayer than had been possible during certain earlier periods of heavy work loads.

Similar problems arising out of a greatly increased volume of work and a relatively small increase in appropriations have been faced and surmounted since 1930 by the various law enforcement units of the Department. Among these are the appropriate offices of the two revenue collecting agencies, the Bureau of Internal Revenue and the Bureau of Customs; the Bureau of Narcotics; the Secret Service Division; and the United States Coast Guard. These services perform important roles with respect to the enforcement of our revenue and maritime laws, the suppression of counterfeiting, and the suppression of illicit trade in narcotics.

I might single out for mention in this connection the alarming increase in the illicit drug traffic which has been coincident with the reopening of former sources of illicit supply in foreign countries, following the close of World War II. The Bureau of Narcotics, at its present strength of fewer than 200 agents, has established a postwar record of efficiency in operation and heroic devotion to duty of which the entire Nation can be proud.

Throughout the Treasury Department, the improvement during the past five years in the quality and efficiency of the service has been the result, in large part, of our management improvement programs, in which you express a particular interest. As you may know, the Treasury Department has been particularly active and aggressive during the postwar period in initiating such programs and in putting their recommendations into effect. The complete details of our programs and the results of their applications to the various organizational units in the Department are summarized in the attached excerpts from the Annual Reports which I submitted to the Congress for the fiscal years 1949 and 1950 (Exhibit 4).

As you will note in these reports, management studies have been made both within the Department and by contract with private management engineering firms. Appraisal of our programs by outside management experts have proved very valuable; and in view of your interest in the use of such advisory services, I have attached a statement which describes the types of surveys made by these organizations and the actions on their recommendations which have been taken by the Department (Exhibit 3).

Throughout the Treasury, the goal of our management-improvement programs has been to cut costs, to improve efficiency, and to render better service to the public. The record shows that we have made a most satisfactory progress toward this goal. As the direct result of the Treasury management-improvement programs during the past 5 years, there have been monetary savings of many millions of dollars. Other savings, the value of which cannot readily be measured in terms of dollars, have also been effected. These savings have been utilized in meeting increased workloads, reducing appropriation requests, strengthening the enforcement work of some of the bureaus, covering the costs of installing new and improved procedures, and meeting operating contingencies. To summarize results attained from the fiscal year 1946 through 1950, exclusive of the Coast Guard which reduced expenditures by $192 million through retrenchment after the war period, it will be noted from the attached material that general pay increases authorized by law amounted to approximately $60 million during the period while the Department's annual expenditures (other than Coast Guard) increased only $24 million. Thus, approximately $36 million was absorbed by the Department in 1950, in addition to absorbing the operating costs involved in greatly increased workload.

In connection with our improvement program, I should like to stress the fact that the Department has made every effort to encourage employee participation. In addition to putting into effect the results of surveys, the Department has made extensive use of its cash-awards and work-simplification programs. Many valuable suggestions leading to improved operations and procedures have initiated with the employees of the Department.

Advantage is also being taken of the provisions of Title X of Public Law 429 of the 81st Congress, which authorized awards for efficiency. You will be interested to know that our experience in the Department indicates that the program made possible by this legislation has great value in encouraging creative thinking and providing channels through which individual employees and groups may improve the efficiency of their own offices and of the Department. I might mention that the first of our efficiency awards was granted to a group of 54 employees in the Division of Disbursement for their efficiency in handling the sharp peak of increased work incident to the issuance of checks for the National Service Life Insurance dividend. The efforts of these particular employees resulted in an estimated saving of $158,000, and cash awards totaling $1,500 were granted to them.

The Treasury Department also has been participating in the continuing program to improve Federal accounting and financial reporting which was undertaken jointly in 1949 by the Treasury Department, the General Accounting Office and the Bureau of the Budget. This important activity is an outstanding example of the steady efforts being made by the Government to improve efficiency of operating practices. Programs of this nature do not make the headlines; as you know, however, they are of very great significance as evidence of the steady progress which is being made in adapting Government operations to the needs of a modern economy.

Many other instances could be cited of the results of the management-improvement programs which are in operation in the Treasury Department. To give a few examples: The operating techniques and the services rendered by the Bureau of Customs have been modernized and greatly improved. A modern accounting system has been established in the Coast Guard, with the assistance and cooperation of the representatives of the joint program for the improvement of accounting and financial reporting which I mentioned earlier. Many accounting innovations are now being tested in the Coast Guard; if successful, they will undoubtedly be adopted throughout the Federal Government.

Finally, I should like to call attention to the fact that the Bureau of Accounts of the Treasury Department is now actively engaged in the work of organizing the accounting and reporting activities of the Department for the purpose of implementing the provisions of the Budget and Accounting Procedures Act of 1950, which you introduced into the Congress and which was passed on September 12 of last year. This legislation is making possible important improvements in Federal Government techniques relating to budgeting, accounting, financial reporting, and auditing.

May I assure you again that the Treasury is deeply appreciative of the opportunity you have given us to furnish the Subcommittee with the information regarding the operations of the Department. If additional data regarding any of our activities or programs would be helpful to you in the future, I should be most happy to provide it.

Sincerely,

(Signed) JOHN W. SNYDER,
Secretary of the Treasury.

Hon. FRANK M. KARSTEN,
Chairman, Public Accounts Subcommittee,
Committee on Expenditures in the Executive Departments,
House of Representatives, Room 1005, House Office Building,
Washington, D. C.

Treasury Department—Summary of workload, personnel, and operating expenditures

	Fiscal year			
	1930	1940	1946	1950
PRINCIPAL WORKLOAD FACTORS				
Number of tax returns filed	5,912,907	19,199,932	81,447,923	89,270,216
Additional tax assessments resulting from enforcement activities	$303,055,027	$393,909,685	$1,280,218,000	$1,747,592,000
Number of entries of merchandise into United States examined	1,041,295	725,624	977,393	1,269,981
Persons entering United States examined	49,092,318	48,552,327	72,977,244	87,000,000
Cases completed (counterfeiting, check forgeries, bond cases, etc.)	1,361	22,945	43,844	42,504
Violations of narcotic laws found	(1)	3,959	2,944	6,163
Number of pieces of currency manufactured	1,064,105,268	1,067,707,880	1,324,788,000	1,643,724,000
Number of stamps manufactured	25,323,631,829	30,067,257,297	38,838,525,314	42,372,420,336
Number of sheets of all types of printing	338,541,969	446,846,250	562,520,170	729,297,594
Number of coins produced	399,467,200	768,091,000	1,658,127,100	497,271,759
Number of checks issued	(2)	106,743,925	134,541,597	189,736,578
Number of depository receipts for withholding taxes functioned	(3)	(3)	3,699,158	4,481,451
Number of checks paid	33,192,836	130,578,489	348,749,450	269,320,659
Number of pieces of currency redeemed	327,000,000	1,197,000,000	1,615,000,000	1,788,000,000
Number of savings bonds issued	(4)	4,752,000	150,147,000	67,891,478
Number of savings bonds retired	(4)	807,000	196,104,000	84,952,771
Number of interest checks issued for series G bonds	(5)	(5)	7,112,908	8,728,509
Number of regular Treasury securities issued	837,657	1,005,000	3,844,000	2,079,265
Number of regular Treasury securities retired	1,883,866	1,969,000	5,877,000	3,114,050
Number of interest checks issued for regular Treasury securities	1,829,170	855,000	895,104	715,186
Number of pieces of outstanding public debt securities requiring servicing	12,132,324	25,009,543	646,692,593	526,193,866
Department totals, exclusive of Coast Guard:				
Number of personnel*	52,695	53,328	96,922	82,462
Expenditures	$160,816,937	$132,412,490	$334,120,183	[6] $358,434,653
U. S. Coast Guard:				
Number of personnel [8]*	12,562	18,666	113,450	28,125
Expenditures	$29,285,769	$44,753,263	$341,368,879	[7] $149,191,232
Department totals, including Coast Guard:				
Number of personnel [8]*	65,257	71,994	210,372	110,587
Expenditures	$190,102,706	$177,165,753	$675,489,062	[9] $507,625.88[illegible]

See footnotes on following page.

Footnotes for table on page 402.

[1] Bureau of Narcotics not established until 1931.
[2] This centralized disbursing function not performed by Treasury Department in 1930.
[3] Began with Current Tax Payment Act of 1943.
[4] First savings bonds were issued in 1935. The bonds retired in the fiscal year 1950 include bonds purchased during the period 1935 through 1950 as opposed to those purchased in 1950.
[5] First series G savings bonds issued in 1941.
[6] The net increase in the Department's expenditures of $24,316,470, from 1946 to 1950, exclusive of Coast Guard, represents primarily the portion of general pay increases authorized by law which could not be absorbed. Such pay increases from fiscal year 1947 through 1950, inclusive, amounted to approximately $60,315,000, exclusive of the Coast Guard. Thus approximately $36,000,000 was absorbed by the Department in addition to absorbing the operating cost involved in the greatly increased workload. The U. S. Coast Guard figures are excluded for the purpose of this comparison due to the large reduction in their expenditures as a result of retrenchment after the war period.
[7] Coast Guard pay, allowance, and retirement increases authorized by law from 1946 to 1950 amounted to approximately $32,000,000 of their total expenditures of $149,191,232 in 1950.
[8] Includes military personnel of U. S. Coast Guard.
[9] The increase of $330 million or 187 percent of expenditures in 1950 over 1940 is attributable, for the most part, to:

(*a*) general civilian pay increases and military pay, allowance, and retirement increases authorized by law amounting to approximately $154 million;

(*b*) during this period tax returns filed increased by 368 percent (19 million to 89 million), and the appropriation for the Bureau of Internal Revenue was increased by $91 million (exclusive of general pay increases) or 144 percent of the total cost in 1940. The remaining 224 percent of the increased workload was absorbed through improvements of procedures, mechanization of operations, etc.;

(*c*) Fiscal Service increase:

(1) checks issued from 107 million to 190 million, or 78 percent,
(2) checks paid from 130 million to 269 million, or 107 percent,
(3) savings bonds issued from 4.8 million to 67.9 million, or 1,314 percent,
(4) savings bonds retired from .8 million to 85 million, or 10,525 percent,
(5) public debt securities outstanding requiring servicing from 25 million to 526 million, or 2,004 percent,
(6) new activity requiring functioning of 4.5 million depositary receipts for withheld taxes, and
(7) new activity involving issuance of 8.7 million series G bond interest checks,

which resulted in an increase of approximately $36 million, or 180 percent, of expenditures exclusive of pay increases;

(*d*) increase of U. S. Coast Guard responsibilities in connection with activities such as lighthouse service, merchant marine inspection transferred from Commerce Department, and new functions, largely growing out of the war, including operation of ocean stations for weather and other services and the establishment and operation of new aids to navigation, which resulted in an expenditure increase of approximately $57 million or 127 percent, excluding civilian general pay and military general pay, allowance and retirement increases authorized by law. Also, the increase is due partly to substantial increases in cost of materials as indicated by the rise in the general price index.

[*] As of June 30.

CHAPTER II

REPLY BY WILLIAM McC. MARTIN, JR., CHAIRMAN OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Letter of Transmittal

January 29, 1952.

Hon. Wright Patman,
Chairman, Subcommittee on General Credit Control and Debt Management of the Joint Committee on the Economic Report, House of Representatives, Washington, D. C.

Dear Mr. Patman: In submitting these answers to your subcommittee's questionnaire of October 12, 1951, on general credit control and debt management, I would like to express appreciation of the subcommittee's patience in awaiting our completion of replies. The questionnaire was an extensive and penetrating one, and, as you know, the preparation of objective and adequate answers has been a task of great magnitude. In preparing replies I have felt at liberty to draw freely upon the wealth of knowledge and experience of other members of the Board of Governors as well as of the Board's staff. Our work has been done in the spirit of providing you and your colleagues with a document which we hope will contribute significantly to a better public understanding of the vital problems that concern your subcommittee.

I am glad to report to you that the Board of Governors as a whole concurs with me in this set of replies.

Sincerely yours,

Wm. McC. Martin, Jr., *Chairman.*

A. Congressional Policy Directives

1. State, citing the appropriate statutes, all of the policy directives now given by Congress to the Board of Governors, the Federal Open Market Committee, and the Federal Reserve Banks, stating in each case the operations to which the directive applies.

Policy directives given by Congress to the Board of Governors

Establishment of discount rates.—Rates of discount charged by the Federal Reserve Banks for the various classes of paper discounted by them are required by Congress to be established by the Reserve Banks, subject to review and determination by the Board of Governors, with a view to accommodating commerce and business. Section 14 (d) of the Federal Reserve Act (U. S. C., Title 12, sec. 357) provides that every Federal Reserve Bank shall have power:

> To establish from time to time, subject to review and determination of the Board of Governors of the Federal Reserve System, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business; but each such bank shall establish such rates every fourteen days, or oftener if deemed necessary by the Board;

Reserve requirements of member banks.—Congress has provided that any exercise by the Board of Governors of its authority to change the reserve requirements of member banks of the Federal Reserve System shall be for the purpose of preventing injurious credit expan-

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sion or contraction. Section 19 of the Federal Reserve Act (U. S. C., Title 12, sec. 462b) provides:

Notwithstanding the other provisions of this section, the Board of Governors of the Federal Reserve System, upon the affirmative vote of not less than four of its members, in order to prevent injurious credit expansion or contraction, may by regulation change the requirements as to reserves to be maintained against demand or time deposits or both (1) by member banks in central reserve cities or (2) by member banks in reserve cities or (3) by member banks not in reserve or central reserve cities or (4) by all member banks; but the amount of the reserve required to be maintained by any such member bank as a result of any such change shall not be less than the amount of the reserves required by law to be maintained by such bank on the date of enactment of the Banking Act of 1935 nor more than twice such amount.

Margin requirement regulation.—The authority of the Board of Governors to regulate margin requirements is exercised under the Congressional policy directive that such regulations shall be for the purpose of preventing excessive use of credit for the purchase or carrying of securities. The Board is authorized to prescribe lower margin requirements if it deems it necessary or appropriate for the accommodation of commerce and industry, having due regard to the general credit situation of the country, and to prescribe higher margin requirements when it deems it necessary or appropriate to prevent excessive use of credit to finance securities transactions.

The pertinent provisions of the Securities Exchange Act of 1934 (U. S. C., Title 15, sec. 78 (g)) are as follows:

(a) For the purpose of preventing the excessive use of credit for the purchase or carrying of securities, the Board of Governors of the Federal Reserve System shall, prior to the effective date of this section and from time to time thereafter, prescribe rules and regulations with respect to the amount of credit that may be initially extended and subsequently maintained on any security (other than an exempted security) registered on a national securities exchange. * * *

(b) Notwithstanding the provisions of subsection (a) of this section, the Board of Governors of the Federal Reserve System, may, from time to time, with respect to all or specified securities or transactions, or classes of securities, or classes of transactions, by such rules and regulations (1) prescribe such lower margin requirements for the initial extension or maintenance of credit as it deems necessary or appropriate for the accommodation of commerce and industry, having due regard to the general credit situation of the country, and (2) prescribe such higher margin requirements for the initial extension or maintenance of credit as it may deem necessary or appropriate to prevent the excessive use of credit to finance transactions in securities.

Consumer credit regulation.—In order "to assist in carrying out the objectives" of the Defense Production Act of 1950 (Public Law 774, 81st Congress), section 601 of that Act authorizes the Board of Governors of the Federal Reserve System "to exercise consumer credit controls in accordance with and to carry out the provisions of Executive Order Number 8843 (August 9, 1941)."

The objectives of the Defense Production Act, as contained in its "Declaration of Policy," are stated to be as follows:

It is the policy of the United States to oppose acts of aggression and to promote peace by insuring respect for world law and the peaceful settlement of differences among nations. * * * The United States is determined to develop and maintain whatever military and economic strength is found to be necessary to carry out this purpose. Under present circumstances, this task requires diversion of certain materials and facilities from civilian use to military and related purposes. * * * In order that this diversion and expansion may proceed at once, and that the national economy may be maintained with the maximum effectiveness and the least hardship, normal civilian production and purchases must be curtailed and redirected.

It is the objective of this Act to provide the President with authority to accomplish these adjustments in the operation of the economy. * * *

Real estate construction credit regulation.—By Executive Order Number 10161 of September 9, 1950, there was delegated to the Board of Governors of the Federal Reserve System the authority of the President under section 602 of the Defense Production Act of 1950, to regulate real estate construction credit (limited by the law to credit with respect to new construction). The policies to govern such regulation and the factors to be considered in prescribing regulations are stated in the Defense Production Act as follows:

SEC. 602 (a) To assist in carrying out the purposes of this Act,[1] the President is authorized from time to time to prescribe regulations with respect to such kind or kinds of real estate construction credit which thereafter may be extended as, in his judgment, it is necessary to regulate in order to prevent or reduce excessive or untimely use of or fluctuations in such credit. * * *

In prescribing and suspending such regulations, including changes from time to time to take account of changing conditions, the President shall consider, among other factors, (1) the level and trend of real-estate construction credit and the various kinds thereof, (2) the effect of the use of such credit upon (i) purchasing power and (ii) demand for real property and improvements thereon and for other goods and services, (3) the need in the national economy for the maintenance of sound credit conditions, and (4) the needs for increased defense production.

Limitation of loans by member banks on stock or bond collateral.—Setting forth a Congressional policy against the undue use of bank loans for the speculative carrying of securities, the Banking Act of 1933 amended section 11 (m) of the Federal Reserve Act (U. S. C., Title 12, sec. 248 (m)) to provide:

Upon the affirmative vote of not less than six of its members the Board of Governors of the Federal Reserve System shall have power to fix from time to time for each Federal reserve district the percentage of individual bank capital and surplus which may be represented by loans secured by stock or bond collateral made by member banks within such district, * * * any percentage so fixed by the Board of Governors of the Federal Reserve System shall be subject to change from time to time upon ten days' notice, and it shall be the duty of the Board to establish such percentages with a view to preventing the undue use of bank loans for the speculative carrying of securities. * * *

Employment Act of 1946.—Applicable to the Board of Governors as well as to other Government agencies is the following declaration of policy contained in the Employment Act of 1946 (Act of February 20, 1946, sec. 2; U. S. C. Title 15, sec. 1021):

The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy, with the assistance and cooperation of industry, agriculture, labor, and State and local governments, 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.

Credit and currency expansion under Act of May 12, 1933.—Among other legislative measures taken in the early thirties to meet deflationary tendencies, the so-called Thomas Amendment of May 12, 1933 (U. S. C., Title 31, sec. 821) authorized the President, upon the making

[1] The objectives of this Act are quoted above in this answer in the paragraph "Consumer credit regulation."

of certain findings, to direct the Secretary of the Treasury to enter into agreements with the Federal Reserve Banks and the Board of Governors of the Federal Reserve System whereby the Reserve Banks would conduct open market operations in Government obligations and purchase such obligations directly from the Treasury. It was provided that, if the Secretary of the Treasury should be unable to secure such agreement on the part of the Reserve Banks and the Board of Governors, the President should be authorized to take certain other measures the authority for which has since been terminated. Among other things, the Thomas Amendment contains the following provision:

> The Board of Governors of the Federal Reserve System, with the approval of the Secretary of the Treasury, may require the Federal Reserve banks to take such action as may be necessary, in the judgment of the Board and of the Secretary of the Treasury, to prevent undue credit expansion.

Other policy directives.—In addition to the policy directives mentioned above, the law contains a number of other provisions setting forth certain guiding principles to be observed by the Board of Governors of the Federal Reserve System in the administration of its regulatory and supervisory functions. Some examples may be mentioned. In admitting State banks to membership in the Federal Reserve System, the Board is required by section 9 of the Federal Reserve Act to consider certain specified factors. Section 32 of the Banking Act of 1933 authorizes the Board to allow interlocking directorates between member banks and securities companies in limited classes of cases when the investment policies of a member bank would not thereby be unduly influenced. In passing upon applications by national banks for permission to exercise trust powers under section 11 (k) of the Federal Reserve Act, the Board may take into consideration the sufficiency of the applying bank's capital and surplus, the needs of the community, and any other facts and circumstances that the Board deems proper. Under section 14 (f) of the Federal Reserve Act, the purchase and sale by the Federal Reserve Banks of acceptances of Federal intermediate credit banks and national agricultural credit corporations are to be made whenever the Board of Governors declares that the "public interest" requires. In granting or withholding voting permits to holding company affiliates under section 5144 of the Revised Statutes, the Board is required to consider the "public interest". Under section 4 of the Federal Reserve Act, the Board may suspend a member bank from the use of the credit facilities of the Federal Reserve System for making "undue use of bank credit." Section 19 of the Federal Reserve Act provides for the prescribing by the Board of different rates of interest payable by member banks on time and savings deposits according to maturities, terms of repayment, location, or discount rates. Under section 30 of the Banking Act of 1933, the Board may remove from office a director or officer of a member bank for continued violation of law or continued "unsafe or unsound practices". The Board has authority to enforce certain provisions of the Clayton Antitrust Act "where applicable to banks, banking associations, and trust companies". Section 14 (g) of the Federal Reserve Act directs the Board to "exercise special supervision" over relations of Federal Reserve Banks with foreign banks. Under section 13 of the Federal Reserve Act the

Board "in unusual and exigent circumstances", by the vote of not less than five members, may authorize Federal Reserve Banks to discount eligible paper for individuals, partnerships and corporations. Under section 13b of the Federal Reserve Act the Board may authorize Reserve Banks to provide credits with maturities not exceeding 5 years for working capital purposes to established industrial or commercial businesses in certain "exceptional circumstances".

Policy directive given by Congress to the Federal Open Market Committee

Section 12A of the Federal Reserve Act, as amended by the Banking Act of 1933 (U. S. C., Title 12, sec. 263), which provides for the creation of the Federal Open Market Committee and the regulation by the Committee of the open market transactions of the Federal Reserve Banks, contains the following policy directive to be observed in connection with open market operations:

> (c) The time, character, and volume of all purchases and sales of paper described in section 14 of this Act as eligible for open-market operations shall be governed with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation of the country.

Policy directives given by Congress to the Federal Reserve Banks

Extensions of credit accommodations.—The eighth paragraph of section 4 of the Federal Reserve Act, as amended by the Banking Act of 1933 (U. S. C., Title 12, sec. 301), provides that the board of directors of each Federal Reserve Bank shall administer the affairs of the bank:

> fairly and impartially and without discrimination in favor of or against any member bank or banks and may, subject to the provisions of law and the orders of the Board of Governors of the Federal Reserve System, extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks, the maintenance of sound credit conditions, and the accommodation of commerce, industry, and agriculture. * * *

Use of bank credit for speculative purposes.—Setting forth Congressional policy against the undue use of credit for speculative purposes, the eighth paragraph of section 4 of the Federal Reserve Act (U. S. C., Title 12, sec. 301) provides:

> Each Federal reserve bank shall keep itself informed of the general character and amount of the loans and investments of its member banks with a view to ascertaining whether undue use is being made of bank credit for the speculative carrying of or trading in securities, real estate, or commodities, or for any other purpose inconsistent with the maintenance of sound credit conditions; and, in determining whether to grant or refuse advances, rediscounts or other credit accommodations, the Federal reserve bank shall give consideration to such information. The chairman of the Federal reserve bank shall report to the Board of Governors of the Federal Reserve System any such undue use of bank credit by any member bank, together with his recommendation. Whenever, in the judgment of the Board of Governors of the Federal Reserve System, any member bank is making such undue use of bank credit, the Board may, in its discretion, after reasonable notice and an opportunity for a hearing, suspend such bank from the use of the credit facilities of the Federal Reserve System and may terminate such suspension or may renew it from time to time.

Establishment of discount rates.—As indicated previously in this answer, in connection with policy directives given to the Board of Governors, Congress has directed that discount rates established by the Federal Reserve Banks, subject to review and determination by the

Board of Governors, shall be fixed "with a view of accommodating commerce and business".

Maintenance of policy record by Board of Governors

In connection with this question, it may be mentioned that, while not itself a policy directive, a provision contained in section 10 of the Federal Reserve Act (U. S. C., Title 12, sec. 247a) requires the Board of Governors to keep a record of all policy actions taken by it, as well as of policy actions taken by the Federal Open Market Committee. This provision reads:

> The Board of Governors of the Federal Reserve System shall keep a complete record of the action taken by the Board and by the Federal Open Market Committee upon all questions of policy relating to open-market operations and shall record therein the votes taken in connection with the determination of open-market policies and the reasons underlying the action of the Board and the Committee in each instance. The Board shall keep a similar record with respect to all questions of policy determined by the Board, and shall include in its annual report to the Congress a full account of the action so taken during the preceding year with respect to open-market policies and operations and with respect to the policies determined by it and shall include in such report a copy of the records required to be kept under the provisions of this paragraph.

2. State the general purposes which the Federal Reserve System seeks to further by means of its operations within the very broad range of discretion left it by the Congressional directives. State the general objectives both of all operations taken as a whole and of particular operations—e. g., open market operations—if the objectives of those operations differ in any way from the over-all objectives.

Within the broad range of discretion left the Federal Reserve System by the Congressional directives enumerated in the reply to Question A–1, it can be said that the long-run purpose which the System seeks to further is to minimize economic fluctuations caused by irregularities in the flow of credit and money, foster more stable values, and thus make possible the smooth functioning of monetary machinery so necessary to promote growth of the country and to improve standards of living. This statement of purpose in layman's language applies to the credit and monetary sphere the principles set forth in the Congressional declaration of policy in the Employment Act of 1946.

Credit and monetary policy alone, of course, cannot attain the indicated goal of steady economic progress. But credit and monetary policy is an indispensable element in the achievement of stable progress.

The foregoing concept of Federal Reserve System purpose describes the objectives of System operation throughout its history. Thus, in reporting to the Senate in 1913 the views of the System's founders, the Chairman of the Committee on Banking and Currency stated with respect to the proposed Federal Reserve Act:

> Senate Bill No. 2639 is intended to establish an auxiliary system of banking, upon principles well understood and approved by the banking community, in its broad essentials, and which, it is confidently believed, will tend to stabilize commerce and finance, to prevent future panics, and place the nation upon an era of enduring prosperity.

In the Annual Report of the Federal Reserve Board for 1923, the broad purposes of System policy were described as follows:

> The problem in good administration under the Federal Reserve System is not only that of limiting the field of uses of Federal Reserve credit to productive

purposes but also of limiting the volume of credit within the field of its appropriate uses to such amount as may be economically justified—that is, justified by commensurate increase in the nation's aggregate productivity.

The Annual Report of the Federal Reserve Board of Governors for 1945 expressed the general purposes of System operations in these words:

It is the Board's belief that the implicit predominant purpose of Federal Reserve policy is to contribute, insofar as the limitations of monetary and credit policy permit, to an economic environment favorable to the highest possible degree of sustained production and employment. Traditionally this over-all policy has been followed by easing credit conditions when deflationary factors prevailed and, conversely, by restrictive measures when inflationary forces threatened.

The specific activities of the Federal Reserve System are concerned with influencing credit conditions and the flow of money. System operations affect the supply, availability, and cost of money primarily by making reserve funds more or less readily available to banks for extending credit or meeting currency needs and collaterally by influencing the supply of funds available to other lending agencies or investors. A secondary method of System influence over credit conditions is by directly affecting the equity margin or maturity terms of selected types of loans extended by banks and other lenders. In practice, System operations are adapted to the constant need for orderly conditions in the money market, i. e., absence of precipitate, disruptive instability, and since the mid-thirties in the Government securities market.

The various specific operations of the Federal Reserve System are directed toward the broad objective of national economic progress. Each instrument of policy, however, operates through somewhat different channels and is designed to accomplish somewhat different specific objectives. Their respective uses, accordingly, must be coordinated and the manner of application and coordination necessarily presents complex problems of judgment. The principal instruments of Reserve System policy, which are discussed at length from various standpoints in answers to other questions, are described briefly below:

(1) Reserve Bank discounts and advances to member banks provide a medium through which a bank at its own initiative may make necessary short-run adjustments in its reserve position. Because of the traditional reluctance of banks to show continuous borrowing, an increase in discounting is itself a factor of restraint on the borrowing banks. The level of the discount rate may reenforce or relax this factor of restraint.

(2) Open market operations are conducted at the initiative of the Federal Reserve for one or both of the following primary purposes: (*a*) to affect the supply of unborrowed bank reserves, or (*b*) to contribute to the maintenance of an orderly money market. Open market operations directed to the first of these objectives have an effect upon the amount of discounts and advances. For this reason, open market operations and discount operations are commonly regarded as companion instruments of System policy. Open market operations directed toward the second objective may modify operations toward the first, depending upon the circumstances prevailing at the time.

(3) Reserve requirements are percentages of their deposits that member banks are required to hold on deposit with the Federal Reserve Banks. The Board is authorized to change these requirements within prescribed limits. Regulatory changes in reserve requirements may be accompanied by open market or discount operations in order to cushion the adjustments of banks and the money market to the changes.

(4) Selective instruments operate by affecting the equity margin or maturity terms of credit in particular sectors of the economy but do not directly affect the over-all supply of reserve funds available. Selective measures may properly be described as subordinate instruments of policy and in some cases have been authorized by Congress for limited periods only. They may be used concurrently with, and as supplements to, the general measures, but they may also be applied apart from general measures, for example, when undue or excessive credit expansion is localized in an area to which selective regulations may be applied without invoking general measures affecting all credit. Presently available selective instruments include those affecting stock market credit, consumer credit, and real estate credit, of which the latter two are available under temporary and restricted statutory authorization.

(5) So-called "moral" suasion (including voluntary credit restraint) and supervisory admonitions may also be employed to discourage or encourage lending activities—either in general or in particular credit sectors. Such endeavors at common action by large numbers of lenders may, for example, request that they pay particular attention to current forces making for instability rather than taking full advantage of immediate market incentives.

3. Trace the principal credit policy actions of the Federal Reserve System from the System's inception to the present and indicate the explanation of such actions, including their relation to changes in business activity.

In tracing the record of the principal policy actions taken by the Federal Reserve System since its inception, it should be recognized that it is impossible for the historian to recapture with exactitude the state of mind and considerations affecting policy decisions taken decades, years, or even months ago. At this vantage point of history, the most reasonable approach is to list chronologically the actions taken, to indicate under broad categories the apparent intent of the respective actions, and to summarize on the basis of available evidence the circumstances surrounding policy actions. The answer to this question, accordingly, is cast in outline form.

The formative years of the Federal Reserve System were years embracing World War I. Initial problems of the System were those of getting established and adjusting System operations to the existing credit mechanisms. With the country's involvement in war, the primary task of the System became that of facilitating war finance, and during the period of war the System's credit operations were largely influenced by special considerations associated with wartime responsibilities. With the end of hostilities in late 1918, attenton was directed to the problem of credit policy and operations appropriate to combating postwar inflationary pressures. The following tabulation, Table I, therefore, begins with policy actions taken in late 1919. The record is carried through November 1951.

Dates in the stub of the outline indicate the period in which the action or actions took place. Where two or more actions were taken in the same period, dates appear in the individual columns only where a particular action covered a briefer period than that shown in the stub. Adjoining columns indicate the form of action taken.

In a further group of columns, the apparent intent of the action is described as "expansionary" (or "restrictive") in those cases where historical evidence would indicate that the primary consideration was to check a contraction or stimulate an expansion (or restrain an expansion) in the credit and money supply, with a view to the domestic economic situation. Action is listed as "for other purposes" where historical evidence would indicate that it was determined primarily by international factors or nonmonetary considerations, such as supporting prices of Government securities. In a few instances actions taken were determined by international as well as domestic monetary considerations or were largely influenced by nonmonetary factors. In such instances, they are listed as "for other purposes" as well as "expansionary" or "restrictive."

Major circumstances surrounding each action are summarized in the last column of the table. The tabulation does not attempt to evaluate the effectiveness of Federal Reserve policy actions. For further background on the individual credit instruments, see answers to other questions, especially those under Section C, Distribution within the Federal Reserve System of Authority on Credit Policies, and Section F, General Credit and Monetary Policies.

TABLE I

Principal Policy Actions of Federal Reserve System [1]

Period	Form of action			Apparent intent of action			Summary of surrounding circumstances
	Open market operations	Discount rate	Moral suasion	Expansionary	Restrictive	For other purposes	
1919—November to 1921—March.	Buying rate on bankers' acceptances raised and holdings reduced sharply.	Raised from range of 4–4½ to 6–7 percent at all Federal Reserve Banks [2] (November 1919–February 1921).	Warnings, Federal Reserve credit not to be used to finance speculation; direct pressure on heavy borrowing banks to reduce indebtedness.	------	X	------	Large expansion of credit; rapidly increasing prices; and heavy commodity, security, and real estate speculation; gold reserve ratio near legal minimum.
1921—April to 1922—August.	Bought $400 million of Government securities (January-March 1922). Buying rate on bankers' acceptances reduced sharply (June 1921–August 1922).	Reduced from range of 6–7 to 4–4½ percent at all Banks.	------	X	------	------	Commodity and agricultural values and business activity at low level; gradual contraction in credit; gold reserves strengthened.
1922—June to 1923—July	Sold $525 million of Government securities. Buying rate on bankers' acceptances raised (September 1922–July 1923).	Raised from 4 to 4½ percent at Boston, New York, and San Francisco Banks, making rate 4½ percent at all Banks (February and March 1923).	------	------	X	------	Production in basic industries at highest level on record; labor fully employed; prices rising; renewed expansion in credit; heavy gold inflow.
1923—December to 1924—October.	Bought $510 million of Government securities (December 1923–September 1924). Buying rates on bankers' acceptances reduced (April-August 1924).	Reduced from 4½ percent to range of 3–4 percent at all Banks (May-October 1924).	------	X	------	X	Business and prices receded; attitude of business community hesitant; European countries undertaking to stabilize currencies and considering return to gold standard; easy money here a check on the inflow of foreign capital and gold and a factor encouraging American foreign investment.
1924—November to 1925—March.	Sold $260 million of Government securities. Buying rate on bankers' acceptances raised.	Raised from 3 to 3½ percent at New York (February 1925).	------	------	X	------	Business at high level; prices rising; some speculation in stocks and real estate; rapid expansion in credit.
1925—November to 1926—January.	Buying rate on bankers' acceptances raised.	Raised from 3½ to 4 percent at 5 Banks [3] making level 4 percent at all Banks.	------	------	X	------	Business activity expanded rapidly in late 1925; member bank borrowing up sharply throughout 1925; food prices up; renewed growth in credit, especially security loans.

1926—April	Bought $65 million of Government securities. Buying rate on bankers' acceptances reduced.	Reduced from 4 to 3½ percent at New York.		X			Liquidation of bank loans in New York City; decline in open market money rates; apparent slowing down in some lines of business activity; decrease in stock prices and brokers' loans.
1926—August to 1926—September.	Sold $80 million of Government securities. Buying rate on bankers' acceptances raised.	Raised from 3½ to 4 percent at New York (August).			X		Rapid growth in bank loans; high business activity; advance in open market money rates; increase in Reserve Bank credit outstanding.
1927—May to 1927—November.	Bought $230 million of Government securities. Buying rate on bankers' acceptances reduced (July-August).	Reduced from 4 to 3½ percent at all Banks (July-September).		X		X	Moderate recession in business; lower level of prices, especially farm products; relatively heavy indebtedness of member banks; and a tendency toward firmer conditions in the money market. Also serious credit stringency and threat of renewed foreign exchange depreciation and instability in Europe, which it was feared would interfere with marketing abroad of farm products, especially cotton.
1928—January to 1929—May.	Sold $405 million of Government securities (January 1928-April 1929). Buying rate on bankers' acceptances raised (January 1928-March 1929).	Raised in 3 stages from 3½ to 5 percent at all Banks.	Pressure by Federal Reserve System on member banks to avoid contributing to growth in speculative security loans.		X		Industrial production expanding rapidly, particularly for durable goods; prices of stocks increasing sharply; huge growth in security loans and new security issues; action aimed at checking speculative activity and making member banks scrutinize loan applications more carefully.

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action: Open market operations	Form of action: Discount rate	Apparent intent of action: Expansionary	Apparent intent of action: Restrictive	Apparent intent of action: For other purposes	Summary of surrounding circumstances
1929—August	Buying rate on bankers' acceptances reduced. Restrictive effect of discount operations moderated by free purchases of bankers' acceptances during autumn to assist seasonal financing of agriculture and trade.	Raised from 5 to 6 percent at New York.	------	X	------	Industrial production, factory employment, and pay rolls at high levels; earnings of corporations at record volume; capital issues numerous and large; speculative credit at banks increasing rapidly; rates charged by banks higher than at any time since 1921; loans to brokers and dealers in securities and stock prices at unprecedented levels.
1929—October to 1930—December	Bought $560 million of Government securities, of which $120 million were bought in 2 days at most critical phase of stock market crash. Buying rate on bankers' acceptances reduced sharply.	Reduced successively from 6 to 2 percent at New York; from 5 to 3 percent at Boston and Cleveland; from 5 to 3½ percent at other Banks.	X	------	------	Recession in industry; commodity and stock prices dropped sharply; private lenders called loans to brokers; bank credit liquidation started. Actions aimed at preventing complete collapse of security markets and money panic, and at making credit easy to facilitate business recovery.
1931—January to 1931—August	Bought $130 million of Government securities (June–August). Buying rate on bankers' acceptances reduced (January–May).	Reduced from range of 2–3½ to 1½–3 percent at 11 Banks [4] (January–May).	X	------	------	Production declining sharply after partial recovery; stock, speculative bond, and commodity prices declining further; credit liquidation increased and currency hoarding developing; increasing bank failures in United States and beginning of banking crises in Europe.
1931—October to 1931—November	Bought large amount of bankers' acceptances at increased rates.	Raised from range of 1½–3 percent at 11 Banks [4] to 3½–4 percent at all Banks. Federal Reserve Banks loaned freely to member Banks at the higher discount rates.	------	------	X	Gold outflow after England abandoned gold standard; declining gold reserves (due to gold outflow of $725 million in 7 weeks), increasing note circulation, and collateral requirements for notes prevented large purchases of United States securities to ease reserve position of member banks and necessitated higher rates to check withdrawals of foreign balances; notwithstanding stock, bond, and commodity prices declining sharply; acceleration of currency hoarding, credit liquidation, and bank failures.

Period	Form of action: Open market operations	Form of action: Discount rate	Form of action: Selective regulations	Apparent intent of action: Expansionary	Apparent intent of action: Restrictive	Apparent intent of action: For other purposes	Summary of surrounding circumstances
1932—January to 1932—August.	Bought $1,110 million of Government securities (mainly in March-June, smaller amounts in July and August). Buying rate on bankers' acceptances reduced (February-June).	Reduced from 4 to 3½ percent at Richmond and Dallas; from 3½ to 2½ percent at New York and Chicago (January-June).	----------	X	----------	----------	Production and stock and bond prices reach depression lows; commodity prices still declining; renewed gold outflow; further credit liquidation and bank failures. Glass-Steagall Act permitting Federal Reserve Banks to use United States securities as collateral for notes enabled Federal Reserve Banks to buy large amounts of securities; member banks reduced indebtedness and acquired excess reserves.
1933—March----------	Bought large amounts of bankers' acceptances at increased rates.	Raised from 2½ to 3½ percent at New York and Chicago.	----------	----------	----------	X	Run on gold and on bank deposits preceding bank holiday, depleting the reserves of Federal Reserve Banks.
1933—April to 1933—November.	Bought $595 million of Government securities. Buying rate on bankers' acceptances reduced sharply, but purchases of Government securities partly offset by decline in acceptance portfolio.	Reduced from 3½ to 2 percent at New York; 3½ to 3 percent at St. Louis; 3½ to 2½ percent at 5 other Banks.[5]	----------	X	----------	----------	Action taken to ease the position of banks and promote recovery after bank "holiday." Production and commodity prices advanced sharply, as well as prices of stocks and speculative bonds, from low levels reached in March.
1934—February to 1935—May.	----------	Reduced from range of 2–3½ percent to 1½–2 percent at all Banks.	----------	X	----------	----------	To promote business recovery and to correspond with the general decline in money rates resulting from beginning of heavy gold inflow and increased member bank excess reserves.
1934—October----------	----------	----------	Margin requirements of 25–45 percent of market value.[6]	----------	----------	X	Initial requirement imposed by and on terms specified by newly adopted Securities Exchange Act of 1934 to prevent the excessive use of credit for purchasing or carrying securities.

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action: Open market operations	Form of action: Discount rate	Form of action: Reserve requirements	Form of action: Selective regulations	Apparent intent of action: Expansionary	Apparent intent of action: Restrictive	Apparent intent of action: For other purposes	Summary of surrounding circumstances
1936—February to 1936—April.				Margin requirements raised from range of 25–45 to 55 percent of market value.[6]		X		Stock market had been advancing with increased rapidity; some growth in credit used for speculative activity.
1936—August			Raised by ½.				X	To reduce large volume of excess reserves created by gold inflow so that the Federal Reserve would be in a better position to influence credit if necessary at some future time. No change in Federal Reserve policy to influence business and credit situation at the time intended by action.
1937—March to 1937—May.			Raised by ⅓ to legal maximum, effective Mar. 1 and May 1.				X	To reduce member bank excess reserves "which would result in an injurious credit expansion if permitted to become the basis of a multiple expansion of bank credit." Action not designed to be restrictive at time but for preparedness. Distinct tendencies toward inflationary developments in business and prices at beginning of year.
1937—April	Bought $96 million of Treasury bonds; also bought bills to offset decline in notes.						X	To maintain orderly conditions in the Government bond market and in money market and to facilitate member bank adjustments to the increased reserve requirements.
1937—August to 1938—April.	Bought $38 million of Government securities (November 1937). Treasury released $300 million of sterilized gold at Federal Open Market Committee request.	Reduced from 2 to 1½ percent at 10 Banks, from 1½ to 1 percent at New York [7] (August-September 1937).	Reduced by ¼ of legal minimum requirements (April 1938).	Margin requirements reduced from 55 to 40 percent of market value (November 1937).	X			To ease credit situation and security markets in view of decline in business activity and commodity and security prices, following business inventory accumulation and inflationary tendencies.

1939—September	Bought $470 million of Treasury bonds and notes but allowed $90 million bills to mature without replacement.	Reduced from 1½ to 1 percent at Boston.[3]					X	Outbreak of war; Government bond prices declined sharply; action taken to prevent development of disorderly conditions or unreasonably abrupt decline in prices of Government securities. System announced that Reserve Banks would lend to member and nonmember banks on Government securities at par at the discount rate. System Treasury bill holdings allowed to run off in view of heavy demand for short-term securities.
1939—October to 1940—January.	Sold $84 million of Treasury bonds and notes (November-January) and allowed $240 million Treasury bills to run off.					X		Strong market demand, which resulted in rapid advances in Government security prices late in 1939, partly met by System sales; gold inflow, business active, prices rising, money easy, credit expanding.
1940	Sold $300 million of Government securities.					X	X	Partial offset to gold inflow; increased excess reserves; large amounts of funds seeking investment; Government security prices rose to new high levels. System sales also to maintain orderly market conditions.
1941—September				On installment credit for purchase of consumer durable goods, down payments 10–33⅓ percent; maximum maturity 18 months; same maturity on installment loans.		X		To assist in curbing unwarranted price advances and in restraining general inflationary tendencies; in particular to restrain expansion of consumer installment credit; and to dampen demand for certain consumer durable goods as their supply became limited by diversions of materials and labor required for the national defense.
1941—November			Raised to legal maximum.			X		To restrain inflationary credit expansion by absorbing about $1.2 billion of excess reserves. Business expanding, prices rising; strong credit demands.
1941—December	Bought $70 million of Government securities.						X	Sharp decline in prices of Government securities due to our entrance into the war; purchases were to help stabilize the market.

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Principal Policy Actions of Federal Reserve System[1]—Continued

Period	Form of action				Apparent intent of action			Summary of surrounding circumstances
	Open market operations	Discount rate	Moral suasion	Selective regulations	Expansionary	Restrictive	For other purposes	
1942—February to 1942—April.		Reduced from 1½ to 1 percent at 10 Banks making rate 1 percent at all Banks.			For Govt. credit			To encourage member banks subject to temporary reserve deficiencies to borrow from the Reserve Banks, rather than to sell Government securities in the open market, as an aid to the financing of the war.
1942—April	Established buying rate of ⅜ percent for Treasury bills.				For Govt. credit			To broaden the market for Treasury bills and to enable banks to invest their idle funds in such bills with assurance as to the liquidity of their investment. Agreed with Treasury to maintain yield level of ⅜ percent on 3-month Treasury bills and of 2½ percent on long-term bonds.
1942—March to 1942—May.				Consumer credit regulations extended to cover noninstallment credit; raised down payments generally to ⅓; lowered maximum maturity to 12–15 months for purchase of expanded list of articles.[9]		For private credit		To support Government's program for financing war by attempting to counteract inflationary effects of military expenditures by restraint of credit for purposes not connected with the war.
1942—May			Joint statement by Federal bank supervisory agencies.			For private credit		Referred to part of President's message to Congress of Apr. 27 urging the paying off of debts, and suggested that banks arrange for amortization of loans to consumers. Examiners instructed to check compliance.
1942—June			Letter to banks from Chairman, Board of Governors.			For private credit		Cooperation of banks enlisted to discourage accumulation of inventories of consumer goods.

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Period	Form of action: Open market operations	Form of action: Discount rate	Form of action: Reserve requirements	Form of action: Selective regulations	Apparent intent of action: Expansionary	Apparent intent of action: Restrictive	Apparent intent of action: For other purposes	Summary of surrounding circumstances
1942—August to 1942—October.			Reduced from 26 to 20 percent at central reserve city banks.		For Govt. credit			To assist New York City and Chicago banks in meeting persistent outflow of funds to other parts of the country caused by heavy Government borrowing in the financial centers and disbursements in other areas, and to supply funds for banks to purchase Treasury securities.
1942—October		Preferential rate of ½ percent on advances secured by short-term Governments.			For Govt. credit			To encourage member banks to utilize their excess reserves to buy Government securities and to assure them of adequate reserves at low cost when needed.
1943—April			Exemption by Congress of Treasury war loan deposits from reserve requirements.		For Govt. credit			To encourage commercial banks to make full use of war-loan deposit accounts, and to eliminate pressure on the banks' reserves in connection with war-loan drives.
1942-1945	Increased holdings of Government securities by $22 billion: Bills, $12.8 billion; certificates, $8.4 billion; and notes $1.3 billion. Bond holdings decreased $500 million.				For Govt. credit			To maintain the structure of prices and yields of Government securities and to supply banks with adequate reserves to enable them to meet the drains on their reserves caused by rapid increase in currency in circulation and other factors, and to enable them to purchase such amounts of Government securities as they were called upon to take.
1945—February to 1946—January.				Margin requirements raised from 40 to 50 percent of market value in February; to 75 percent in July; and to 100 percent in January 1946.		X		Continued upward trend of stock prices, volume of trading, and stock market credit.

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action: Open market operations	Form of action: Discount rate	Form of action: Selective regulations	Apparent intent of action: Expansionary	Apparent intent of action: Restrictive	Apparent intent of action: For other purposes	Summary of surrounding circumstances
1946—April to 1946—May	------	Removal of preferential rate of ½ percent on advances secured by short-term Government securities.	------	------	X	------	Required borrowing banks to pay regular discount rate of 1 percent and thereby made it less easy for member banks to obtain Federal Reserve credit on the basis of which to expand loans. Indicated that the Federal Reserve System did not favor a further decline in interest rates in the circumstances then prevailing.
1946—January to 1947—October.	Reduced total holdings of Government securities by more than $2 billion. Retirements of about $7 billion of maturing securities offset in part by $5 billion net purchases of other short-term securities. Buying rate on bankers' acceptances raised (July–August 1946).	------	------	------	X	------	Restrained growth in member bank reserves (due chiefly to gold inflow) by redeeming maturing United States securities as Treasury retired securities using accumulated balances in war loan accounts and budget surplus. Business active; inflationary pressures were strong.
1946—December	------	------	Removed noninstallment credit from regulation; list of articles under credit control curtailed.	------	------	X	For purpose of simplifying the regulation, making it administratively more workable, and narrowing its scope to a minimum consistent with the exercising of a stabilizing influence on the economy. Amended regulation covered approximately 70 percent of installment credit.
1947—February	------	------	Margin requirements reduced from 100 to 75 percent of market value.	------	------	X	Stock prices and the volume of credit in the stock market had been reduced to levels at or below those prevailing at the time of the previous increase in requirements.
1947—July to 1947—October.	Discontinued buying rate of ⅜ percent on Treasury bills and support of certificates at ⅞ percent.	------	------	------	X	------	Relieved Federal Reserve System of necessity of continuing to buy short-term securities at the extremely low wartime rates and thereby providing the basis for further monetary expansion. Business activity at very high levels; inflationary pressures strong. Coupon rates on new issues of certificates raised by Treasury to 1 percent.

Period	Form of action				Apparent intent of action			Summary of surrounding circumstances
	Open market operations	Discount rate	Moral suasion	Reserve requirements	Expansionary	Restrictive	For other purposes	
1947—November to 1948—March.	Bought $5 billion Treasury bonds.						X	Bought large amounts of Treasury bonds in November and December to stem decline in bond prices. Dropped buying prices in late December to levels slightly above par. Bought bonds thereafter to maintain these price levels.
	Sold or redeemed over $6 billion of short-term Government securities. Buying rate on bankers' acceptances raised (December 1947-January 1948).					X		Sold or redeemed short-term Treasury securities, partly to offset effect on bank reserves of bond purchases and continued gold inflow, in the effort to restrain the growth in bank credit. Inflationary pressures continued strong. Short-term rates rose further.
1947—November			Joint statement by bank supervisory authorities.			X		Urged banks to avoid making nonessential loans in view of inflationary conditions. Statement was followed by action by American Bankers Association to arrange bankers' meetings in various parts of the country early in 1948 to urge aviodance of unnecessary or undesirable extensions of credit.
1948—January to 1948—August.	Buying rate on bankers' acceptances raised (August).	Raised from 1 to 1½ percent at all Banks.				X		Part of an anti-inflationary program designed to keep pressure on member bank reserves and thereby to restrain expansion of bank credit and at the same time continue the policy of stabilizing the long-term rate on Government bonds.
1948—February to 1948—September.	Bought $2 billion Government securities in September including $1.5 billion bonds and $500 million bills, certificates, and notes.			Raised on demand deposits from 20 to 26 percent at central reserve city banks; 20 to 22 percent at reserve city; and 14 to 16 percent at country banks; on time deposits from 6 to 7½ percent at all banks.		X	X	Reserve requirement action to help absorb additional reserves made available by gold inflow and by Federal Reserve purchases in support of the market for Government securities. Congress provided authority (until June 30, 1949) for increases in reserve requirements above those otherwise authorized. Securities purchased in open market to maintain the stability of the market and to assist temporarily in the adjustment of member banks to increased reserve requirements.

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action			Apparent intent of action			Summary of surrounding circumstances
	Open-market operations	Reserve requirements	Selective regulations	Expansionary	Restrictive	For other purposes	
1948—September			On installment credit for a list of consumer durable goods reimposed down payment of 20–33⅓ percent; maximum maturity 15–18 months; same maturity on installment loans.		X		Congress restored (until June 30, 1949) Board's authority to regulate consumer credit, which it had terminated in November 1947. Consumer installment credit was expanding at a rate of $2 billion a year; this growth was contributing to inflationary pressures. Regulation as reestablished affected about 70 percent of consumer installment credit.
1949—March			Margin requirements reduced from 75 to 50 percent of market value.	X			Stock market credit outstanding was close to the lowest level on record. Stock prices declining and volume of trading low. Equity financing of business small.
1949—March to 1949—April			On consumer installment credit reduced down payment to 10 percent (except on autos); increased maturity to 24 months on all listed articles.	X			Consumer buying pressures had moderated significantly; many commodities covered by regulation in larger supply; consumer installment credit expanding less rapidly than formerly; general inflationary pressures had abated somewhat.
1949—May to 1949—September.		Reduced on demand deposits by 4 percentage points; on time deposits by 2½ percentage points. Changes in several steps.		X			Recession in business and prices. Credit policy aimed at encouraging a high level of business activity, but avoiding conditions of such ease as would prevent needed adjustments or encourage undue expansion.
1949—January to 1949—September.	Reduced holdings of Government securities by more than $5 billion. Sold over $3 billion of bonds from January through June; sold or redeemed $2 billion of bills, certificates, and notes.					X	To prevent prices of long-term bonds from rising sharply and to meet heavy demands for short-term United States securities arising out of reduced member bank reserve requirements, net Government disbursements, reduced currency circulation, gold inflow, and other factors. More flexible credit policy announced June 28 determining operations on

basis of the needs of genera lbusiness and credit situation and of maintaining orderly conditions in the Government security market, rather than a fixed pattern of rates on United States Government securities. Open market operations throughout the period consistent with easier credit conditions, while recession lasted.

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action				Apparent intent of action			Summary of surrounding circumstances
	Open market operations	Discount rate	Moral suasion	Selective regulations	Expansionary	Restrictive	For other purposes	
1949—November to 1950—June.	Sold $1.5 billion of long-term Treasury bonds.	----	----	----	----	X	----	Sales of bonds to meet market demand for long-term securities and discourage over-extension of private long-term financing.
	Bought a net of $1.6 billion of short-term Government securities. Little change in total portfolio.	----	----	----	----	----	X	Operations designed to allow money market to firm moderately in response to increased demand for funds, as business recovery gained momentum and signs of inflationary pressures reappeared, and at same time to aid Treasury refunding. Slight rise in yields on both short-term and long-term securities.
1950—August	Buying rate on bankers' acceptances raised.	Raised from 1½ to 1¾ percent at all Banks.	Request by bank supervisory agencies for voluntary cooperation of lenders in restraining credit.	----	----	X	----	Output and employment close to peacetime record levels; accelerated expansion of credit; prices rising; prospective increases in Government expenditures for military purposes. System announced it was prepared to use all means at its command to restrain further bank credit expansion consistent with policy of maintaining orderly conditions in Government securities market.
1950—August to 1950—December.	Bought $8 billion of maturing Government securities (August), $1 billion of restricted bonds (September–December), and $1.4 billion of short-term securities (December).	----	----	----	----	----	X	Purchases to aid Treasury refundings and prevent decline in long-term bonds below par.
	Sold $7 billion of short-term Government securities (August).	----	----	----	----	X	----	Sales of short-term securities at lower prices (higher yields) to offset effect of purchases. NOTE.—The above-mentioned sales did not completely offset purchases

								so that the actual net effect of operations for this period was expansionary.
1950—September to 1950—October.				On installment credit for list of consumer durable goods down payments 10–33⅓ percent; maximum maturity 15 months, except home improvements 30 months; maximum maturity of 15 months on installment loans.		X		Unprecedented rate of expansion of consumer installment and real estate credit. Regulations are parts of fiscal, monetary, and credit measures to restrain inflationary pressures and facilitate diversion of critical material and manpower to production of defense needs, under authority of Defense Production Act of 1950. For reasons of administrative and regulative efficiency consumer credit regulation confined to installment credit and scope set to affect about 75 percent of such business.
				On real estate credit down payments 10–50 percent of value of residential property; maximum maturity 20 years with certain exceptions.		X		

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action				Apparent intent of action			Summary of surrounding circumstances
	Open market operations	Moral suasion	Reserve requirements	Selective regulations	Expansionary	Restrictive	For other purposes	
1950—November		Banks again requested to restrain unnecessary credit expansion.				X		Unprecedented expansion in bank loans from midyear to mid-November. Continued expansion in credit put upward pressure on prices, impairing purchasing power of dollar and adding to cost of defense program.
1951—January to 1951—February.	Bought $800 million of long-term Treasury bonds.						X	To maintain prices of long-term Government securities.
			Raised by 2 percent on demand deposits; 1 percent on time deposits; maximum limits except at central reserve city banks.			X		Continued expansion of bank credit. Action taken to absorb about $2 billion of funds, largely from seasonal return of currency and System purchases of bonds, and generally to reduce the ability of banks to expand credit that would add to inflationary pressures. At central reserve city banks requirements were raised to a level considerably above those that prevailed during most of the war period.
	Bought a net of $300 million of short-term Government securities.						X	To facilitate adjustment to reserve requirement increase.
1951—January				Margin requirements raised from 50 to 75 percent of market value.		X		Continued upward trend of stock prices, volume of trading, and stock market credit.
1951—January to 1951—February.				Real estate credit control extended to cover multifamily and certain nonresidential properties.		X		To add further restraints on inflation by limiting the credit available for the financing of nonresidential construction and to bring about a decrease in building to provide materials and labor for the defense program.

1951—February to 1951—May.		All financing institutions requested to participate in program of voluntary credit restraint.				X		Program formulated by representatives of banks, investment bankers, and life insurance companies, in consultation with Federal Reserve representatives, for organized effort by all types of financing institutions to restrain unnecessary credit expansion in accordance with the Defense Production Act of 1950.
1951—March to 1951—mid-April.	Lowered buying prices on Government securities.					X		Action taken, under Treasury-Federal Reserve accord, to terminate support of Government securities market at fixed prices, with a view to promoting a self-sustaining market and discouraging sales of Government securities to Federal Reserve System to obtain funds with which to extend credit to private borrowers.
	Bought $1.1 billion of Treasury bonds and $100 million of bills.						X	Interim purchases taken to maintain orderly market conditions in transition to self-sustaining market and to facilitate exchange of long-term marketable bonds into nonmarketable bonds with longer term and higher interest coupon.

Footnotes on p. 233.

Principal Policy Actions of Federal Reserve System [1]—Continued

Period	Form of action		Apparent intent of action			Summary of surrounding circumstances
	Open market operations	Selective regulations	Expansionary	Restrictive	For other purposes	
1951—April	Ceased purchases of Government securities except primarily to maintain orderly market conditions.			X		To minimize monetization of public debt without jeopardizing necessary Government financing; to enable the Federal Reserve System to regain greater control over its extensions of Federal Reserve credit through security operations, and thereby more effectively to restrain inflationary expansion of credit.
1951—mid-April to 1951—November	Bought $300 million of long-term bonds through June, and $1.5 billion of short-term securities during refunding periods.				X	Purchased restricted bonds to aid in readjustment of bond market; purchased short-term securities to aid in Treasury refundings.
	Sold or redeemed $1.7 billion of short-term Government securities at other times.			X		Sales to absorb reserves created by above purchases.
1951—July		On installment credit for list of consumer durable goods and for installment loans increased maximum maturity to 18 months (home improvements, 36 months); down payment on appliances reduced to 15 percent cash or cash and trade-in.			X	Action taken to bring Regulation W into conformity with the provisions of the Defense Production Act Amendments of 1951.
1951—September		Increased maximum maturity to 25 years for houses up to $12,000; raised maximum value per family unit for specified down payment requirements; suspended credit restrictions for programmed housing in critical defense housing areas.			X	Action taken to bring Regulation X into conformity with the provisions of the Defense Housing and Community Facilities and Services Act of 1951.

[1] In the early years of the System the Federal Reserve Banks established a variety of discount rates differing by class of paper and by maturity. The tendency, however, was toward a simplification of the rate structure, and early in 1920 a single rate prevailed at each Reserve Bank for discounts of and advances secured by eligible commercial, agricultural, or industrial paper of all maturities. In this early period there were substantial open-market operations in bankers' acceptances, which were largely seasonal and corresponded closely to seasonal changes in currency demand. Changes in Federal Reserve buying rates on acceptances were used to some extent to influence the expansion and contraction of credit. Such actions are shown under open market operations in the periods when they were especially important.

[2] At four of the Federal Reserve Banks progressively higher rates were charged on discounts over basic lines during all or part of the period April 1920–July 1921. See Banking and Monetary Statistics, p. 422.

[3] Boston, New York, Philadelphia, Cleveland, and San Francisco.

[4] No change at Federal Reserve Bank of Minneapolis, where rate remained at 3½ percent.

[5] Boston, Philadelphia, Cleveland, Chicago, and San Francisco.

[6] General rule for extensions of credit by brokers and dealers on listed securities other than exempted securities and, beginning May 1, 1936, for loans by banks on stocks for the purpose of purchasing or carrying listed stocks.

[7] No change at Federal Reserve Bank of Cleveland, where rate was already 1½ percent.

[8] During September the discount rate on advances to member banks on U. S. Government securities was reduced from 1½ to 1 percent at the Federal Reserve Banks of Atlanta, Chicago, St. Louis, Kansas City, and Dallas.

[9] With certain exceptions.

4. Discuss the relation of credit and monetary policy to fiscal and other policies of the Government in combating inflation or deflation.

Credit and monetary policies and fiscal and debt management policies are interrelated means available to Government for combating inflation or deflation. They are impersonal and operate through market mechanisms, and consequently are appropriate for use by governments of private-enterprise countries in their efforts to encourage orderly economic growth.

Credit and monetary policies affect income and expenditures particularly of the private sector of the economy through their influence on the volume of money, on the total amount, availability of credit, and cost of lending and borrowing (both public and private), on capital values, and on the purchasing power of the dollar, at home and abroad. Fiscal policies affect national income by regulating the amount, character, and timing of Government spending and the amount, type, and timing of taxes collected. These, in turn, affect expenditures by individuals and businesses. Methods of public borrowing and management of the public debt, which may be considered as an aspect of fiscal policy, are closely related to credit and monetary policies. With public debt so large a part of the capital market, types of Government securities and the terms of their offering have significant effects on the market for non-Federal obligations and on the cost and availability of credit generally.

To an important extent, credit and monetary policies and fiscal and debt management policies are complementary instruments of Government policy. They are most effective when they operate to supplement each other for a common purpose, namely, promotion of stable economic progress. In a period of inflationary pressures, buying power can be reduced by fiscal action through reducing Government expenditures and increasing taxes. Debt management policies may be directed toward moderating the financial liquidity of the economy. Credit and monetary action may curb demand for goods and services by businesses and individuals. Thus, it may be possible to curb inflation through heavier taxes, through methods of borrowing and refinancing public debt, through credit restraint, and through varying combinations of these measures, or in some instances through one type of policy alone. In an inflationary period it is unfortunate if the restrictive effect of higher taxes is offset by expansive credit and monetary policies, or if restrictive credit and monetary policies are offset by expansive fiscal policies or debt management policies. At times, however, when fiscal actions are unavoidably inflationary, monetary measures need to be restrictive with respect to private credit.

Each type of policy has its own advantages and disadvantages. As a rule credit and monetary policies are more flexible, within limits set by statute, and can change sharply and quickly if conditions so require. Debt management action lends itself to more flexible dovetailing with credit and monetary policies than do other aspects of fiscal policy. Credit and monetary policies, especially as effected through general instruments of policy—discount rates, open market operations, and reserve requirements—are also less subject to pressure from private-interest groups than are fiscal policies. Operating as they do through the money markets, the credit and monetary authorities are in close and constant contact with the changing moods and temper of the financial and business community. They are thus in a position to feel early the impulses of changing trends and to adapt promptly or even reverse their policies in response to current forces. Hence, credit and monetary policies are especially sensitive means of counterbalancing unstabilizing developments in their incipiency.

Fiscal measures, except to the limited extent that they operate automatically in a contra-cyclical direction—for example, through variations in Government outlays and tax receipts resulting from changes in national income—cannot be so quickly adjusted to short-term variations in economic conditions as can credit and monetary actions. Much time is necessarily absorbed in the legislative process—in the initial formulation of programs, in their consideration, and in final enactment. Additional time may be required in the execution of such programs. Fiscal policies in their detailed formulation are also more complex, more controversial, and more directly related to the distribution of income than are credit and monetary policies. This is one reason why fiscal policies are more difficult to use as a means of economic regulation than are monetary policies.

It is difficult and sometimes impossible or inadvisable for the Government to vary its whole program of expenditure and taxation promptly according to the requirements of economic stability. Other policies may be considered so important at times as to outweigh considerations of economic stability in governmental decisions. The conduct of war is the most striking example of such a situation. Aid for the postwar reconstruction of Europe is another example of much more moderate proportions. Also, in instances in which long-range projects have been already undertaken, it may be impractical or wasteful to bring them to a halt before completion even though continuing them may have unstabilizing tendencies. In such situations, credit and monetary policies need to be restrictive, with as much aid as possible from debt management policies, so that private spending will not be unduly stimulated.

Credit and monetary policies are commonly viewed as being more powerful in combating inflation than they are in combating deflation. The occasions when this has been true have followed booms which seriously distorted the economy. This is one reason why avoidance of depression requires restraint of excessive expansion during the preceding boom. Credit and monetary policies can be effective in combating tendencies toward deflation as well as inflation when there is a marginal loan demand by credit-worthy borrowers. Under such circumstances, availability of credit to meet their demands for loans is dependent upon the state of liquidity of lenders generally and particularly of commercial banks. Thus, tendencies toward deflation can be significantly influenced by credit and monetary action. In periods of depression following excessive over-expansion, banks and lenders generally may not be willing to lend freely even if they are made liquid by credit and monetary policies. This may happen when potential credit-worthy borrowers feel that borrowing would not be profitable and when either lenders or borrowers feel unable to incur the risks. In these conditions, fiscal action may be required to revive business activity.

By restricting the volume of credit and the money supply during inflationary periods, credit and monetary policies can restrain excessive growth in civilian demand for goods and services and thereby contribute to the prevention of deflation and depression. The most important reason for curbing inflation is to avoid the inequities that usually develop during inflations in the distribution of income as between those whose incomes are relatively fixed and those whose incomes respond readily to inflationary pressures. Inflation fosters distortions in the economic structure as between products and segments of the economy that change slowly in response to inflationary pressures and those that adjust quickly. In addition, inflation encourages over-expansion by consumers and businesses in order to anticipate future requirements and to protect themselves against price increases. This process commonly leads in many lines to the building-up of excess capacity and stocks with the consequence that opportunities for sound borrowing later by businesses and consumers may be reduced. It is these distortions, over-commitments, and excessive expansions of capacity and stocks which characteristically develop during inflationary periods that lay the ground work for declining and even panic markets and subsequent deflation and depression.

Fiscal policies can attack the problems of combating deflation and depression directly by increasing public expenditures or lowering taxes, or both, so as to cushion or offset the decline in the total volume of private income and expenditures in the economy. In inflationary periods, fiscal policies can contribute greatly to stability through reduced Government expenditures and higher taxes.

There are limitations, however, on the stabilizing effects of fiscal policies. During inflation, for example, total spending will not decline as a result of fiscal action if the dollars taxed away are replaced by credit dollars. There are, moreover, strong pressures against raising taxes, and it is always possible that by the time taxes have been raised total incomes will have risen further. Also, some increases in taxes may tend to dampen incentives to efficient production or to encourage extravagance, thus adding to inflationary pressures. On occasion, higher tax rates may be partially offset, at least temporarily, by efforts of business and labor to maintain the levels of their incomes after taxes through price and wage increases. Other complexities with respect to fiscal action may be encountered during deflation.

Methods of public borrowing and management of the public debt can be a helpful complementary tool of contra-cyclical Government policy. To the extent that Government securities are sold to and held by nonbank investors, the Government's needs are financed by the long-term savings and short-term funds in the economy. To the extent on the other hand that Government securities are sold to banks, new funds are likely to be created and the money supply increased, unless banks correspondingly reduce other types of credit. If Government securities are purchased by Federal Reserve Banks, the result is to increase the supply of reserves available to banks and to provide the basis for a multiple expansion in bank credit. The effect of sales to commercial banks and Reserve Banks hence tends to be inflationary. The types, maturities, and yields of securities offered are important in determining what types of buyers will acquire them and, consequently, have an effect on general economic stability.

Appropriate fiscal policies, appropriate debt management policies, and appropriate credit and monetary policies can all contribute to economic stability. The exact combinations of policies which will be most desirable at any particular time will depend greatly on circumstances and the practical feasibility of action in one field or another. They are re-enforcing instruments of public policy.

With respect to other public policies to combat inflation and deflation, such as price and wage controls and direct Government lending, their relation to credit and monetary policies depends on the circumstances and the nature of the policies at the time. Similarly, other public policies or programs not specifically designed to combat inflation and deflation, such as allocations of materials, welfare measures, promotion of housing construction, and veterans' benefits, may at any particular time contribute to or impede credit and monetary policies and other policies which are directly focused on combating inflation or deflation.

As a rule, the best stabilization policies are those which operate as generally and impersonally as possible through the price mechanism, with a minimum of direct intervention in the customary operations of markets. For this reason, as well as because they affect directly the volume of spendable funds and the money supply, fiscal measures, including debt management policies, and credit and monetary measures are considered primary instruments of Government stabilization policy. They deal directly with the causes of inflation and deflation. While direct controls may be needed at times to forestall cumulative run-ups in prices and wages and to channel resources to special purposes, notably defense, these controls do not affect the basic inflationary forces, and, in the absence of appropriate fiscal and debt management policies and appropriate credit and monetary policies, are not likely to achieve stability.

5. Do you believe that the Congressional declaration of policy contained in the Employment Act of 1946, which reads as follows:

> The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy, with the assistance and cooperation of industry, agriculture, labor, and State and local governments, 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.

is balanced in its emphasis upon high-level employment and price stability respectively, as objectives of Federal Government policy? Suggest any changes by which you think it might be improved.

The drafting of appropriate language for a broad objective or declaration of economic policy to be followed by the Government as a whole presents serious difficulties. There have been many efforts over the years to write into law specific goals toward which credit and monetary policy should be directed, and the Board of Governors from time to time has given consideration to this matter in connection with bills introduced in Congress. The declaration of policy contained in the Employment Act of 1946 is a very carefully phrased statement of objectives of economic policy as they apply to all Federal agencies, including the Board of Governors of the Federal Reserve System. It appears to be specific enough and comprehensive enough to serve the needs of national economic policy generally and of credit and monetary policy. The language in this declaration was hammered out over a period of many months of staff work, extensive public hearings, and Congressional debate. In the form finally enacted, the statement reflects the thinking of many responsible individuals throughout the country, with varying backgrounds, interests, and points of view.

A possible weakness in the declaration of policy contained in the Employment Act of 1946 is that it makes no specific mention of policy to prevent inflation. For this reason the statement may seem open to interpretation as a directive to promote expansion of production and employment regardless of the means employed and the possible injurious consequences that might develop from unsustainable increases in credit, excessive rises in prices, over-development in specific areas, and distortions in the distribution of income. These are the consequences which arise out of inflation and which lead ultimately to deflation and depression and attendant evils of financial dislocation and unemployment. It is generally recognized that the objective of long-range economic progress is best pursued by checking the stimulating influence of credit expansion and speculation before the danger point is reached.

It may be said, however, that notwithstanding the emphasis on expansive policies—justifiable for a growing economy—the declaration of policy in the Employment Act implicitly includes the objective of restraining excessive and unsound expansion. The words "creating and maintaining in a manner calculated to foster and promote * * * the general welfare," considered in connection with the phrase "to promote maximum employment, production, and purchasing power" seems clearly to imply a directive to determine policies with a view to longer-run economic stability. One can hardly conceive of circumstances in which the general welfare would be fostered and promoted and maximum production or purchasing power would be "maintained" if prices were highly unstable and credit use were unrestricted. Indeed, "purchasing power" can only be reasonably interpreted in terms of ability to purchase real goods and services, and to maximize this ability necessarily requires maintenance of reasonable stability for the value of the dollar, as well as the avoidance of credit liquidation that would inevitably follow excessive credit expansion.

If this interpretation of the policy declaration contained in the Employment Act of 1946 is a correct and valid one in the light of the legislative background of the Act, then that policy declaration adequately serves the purpose of providing a broad and workable guide for the determination of credit and monetary policy as well as for national economic policy in general. On the other hand, if there is any widespread doubt that the policy declaration has this meaning, then it would be desirable to amend it to include a more explicit reference to the objective of longer-run monetary stability.

6. Do you believe that a broad directive with respect to economic policy should be given the Federal Reserve System by Congress? If so, state the general character of the directive which you would recommend. If you believe there should be no such directive, state your reasons for this belief.

As stated in the answer to Question A-2, the long-range purpose which has guided the Federal Reserve System operations in endeavoring to provide a smoothly functioning monetary machinery, has been the promotion of stable economic progress at high levels of employment and production. The problem of economic stability is highly complex. The Reserve System deals with only some, albeit very important, aspects of the problem. The System has long recognized that no single index or simple combination of indicators can serve as a continuing infallible guide to its policy, and that credit and monetary policy while indispensable cannot alone assure stable progress.

The goals and the guides of credit and monetary policy must be broad and adaptable to changing times and conditions. However formulated, their pursuit inevitably requires discretion, patience, and skillful judgment in the light of the fullest and widest information available respecting the credit situation and indeed all phases of the national economy. Moreover, their success will be conditioned by various other policies, programs, and activities of Government,[2] by a wide range of private activities, and by the changing moods and impulses of businesses and the public generally with respect to spending, borrowing, and saving. The manifold elements affecting economic stability will each be influenced in some measure by credit and monetary policy, but the degree of influence will vary considerably under different circumstances.

The Reserve System functions today under the statutory directives of the Federal Reserve Act as enumerated in the reply to Question A-1 and interpreted broadly in the reply to Question A-2, together with the Congressional declaration of national economic policy in the Employment Act of 1946 as construed in the answer to Question A-5. While it is believed that existing directives given by Congress to the Federal Reserve System provide a feasible frame of reference for appropriate and flexible credit and monetary policy, it is recognized that the System is now nearly 40 years old and that it is fitting at this time to reassess and redetermine its purposes and operations.

B. Relationship to Executive Branch

7. In the light of the Federal Reserve Act, what is the responsibility of (*a*) the Chairman, (*b*) the Vice Chairman, and (*c*) the other members of the Board of Governors to the President in the performance of their respective functions? If some functions are performed in accordance with policies determined by the President, and others independently of the policy of the President, state which functions fall in each category.

The Board of Governors has been recognized as an independent establishment of the Government. The Federal Reserve Act pre-

[2] Policies with respect to volume and nature of Government expenditures and taxes, debt-management, lending by Government agencies, international political and trade relations, military programs, regulation of prices, working hours and wages, social security, unemployment relief, agricultural assistance, public works and many others.

scribes the responsibilities of the Board and indicates that the Board is to act upon the basis of its own best judgment, subject to such guiding principles and restrictions as Congress has prescribed. However, the Board's important functions, especially in the credit and monetary fields, are closely affected by those of other agencies of the Government. Accordingly, in taking any important action, the Board gives careful consideration to policies indicated by the Executive or by the various Government agencies in order that its policies and those of the Government as a whole may be integrated to the fullest extent practicable in the light of the System's statutory responsibilities. In carrying out some functions which it exercises pursuant to certain authority other than the Federal Reserve Act, the Board has a direct responsibility to the President.

In a number of provisions of the Federal Reserve Act, as mentioned in the answer to Question A–1, Congress has given a mandate or has laid down a guiding principle to govern the exercise of the Board's functions, thus indicating that within those mandates or guiding principles the Board shall act upon its own initiative with a view to the public interest. Important examples are the provisions of section 19 which authorize the Board to change the reserve requirements of member banks "in order to prevent injurious credit expansion or contraction", and those of section 14 (d) which require that discount rates established by the Federal Reserve Banks, subject to review and determination by the Board, shall be fixed "with a view of accommodating commerce and business." In addition, section 12A requires that open market operations conducted under the direction of the Federal Open Market Committee, which includes the members of the Board of Governors, shall be governed "with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation of the country."

Section 10 of the Federal Reserve Act requires the Board annually to make a full report of its operations to the Speaker of the House of Representatives, who is required to have the report printed for the information of Congress. The Board is required to include in its annual report to Congress a full account of its policy actions and those of the Federal Open Market Committee; and, under the provisions of section 14 (b), authorizing the Federal Reserve Banks to purchase and sell Government obligations directly from and to the United States, the Board's annual report is also required to include detailed information with respect to such direct purchases and sales from or to the United States. The members of the Board of Governors are appointed by the President for definite terms and are subject to removal by him, but all such appointments must be made with the advice and consent of the Senate and a member may not be removed by the President except for cause.

Under the Federal Reserve Act, the Chairman and Vice Chairman of the Board of Governors are designated by the President to serve as such for terms of four years. The Act provides that the Chairman shall preside at meetings of the Board and that in his absence the Vice Chairman shall preside. The Act further provides that the Chairman, subject to the Board's supervision, shall be its active executive officer.

Certain provisions of the so-called Thomas Amendment of May 12, 1933 (U. S. C., Title 31, sec. 821) indicated the intent of Congress that, in engaging in open market operations in Government bonds under that statute, the Federal Reserve System should have authority to take action according to its own best judgment. The Thomas Amendment authorized the President in certain circumstances to direct the Secretary of the Treasury to enter into agreements with the Reserve Banks and the Board of Governors whereby the Reserve Banks would conduct open market operations in obligations of the United States and purchase such obligations directly from the Treasury; but it was provided that if the Secretary of the Treasury was unable to secure the assent of the Federal Reserve Banks and the Board to the conduct of such open market operations, then the President was authorized to direct the Secretary to take certain other measures the authority for which has since been terminated.

Apart from the Federal Reserve Act, there are certain statutes, relating to international financial operations and, more recently, to emergency functions under the defense program, which impose upon the Chairman and the Board certain responsibilities to the President.

Under the Bretton Woods Agreements Act of 1945, the Chairman is made a member of the National Advisory Council on International Monetary and Financial Problems (U. S. C., Title 22, sec. 286 b). Membership in the Council gives rise to an indirect type of relationship between the Chairman and the President, which is described in fuller detail in the reply to Question B-14.

Certain functions of the President under the Defense Production Act of 1950, as amended, have been delegated by him to the Board of Governors. By Executive Order No. 10161 of September 9, 1950, there was delegated to the Board of Governors the President's authority to prescribe regulations with respect to real estate construction credit under section 602 of that Act; to prescribe regulations, rates, fees, and procedures with respect to guarantees of defense production loans under section 301; and, pursuant to section 708, to consult with representatives of "financing" for the purpose of encouraging the making of voluntary agreements and programs to further the objectives of the Act.

These delegations of authority by the President to the Board were made pursuant to section 703 of the Defense Production Act of 1950, which authorizes the President to delegate any power or authority conferred upon him by that Act to any officer or agency of the Government. By virtue of Executive Orders Nos. 10193 of December 16, 1950, and 10281 of August 28, 1951, all functions delegated or assigned under Executive Order No. 10161 are required to be performed by the respective officers concerned subject to the direction, control, and coordination of the Director of Defense Mobilization. Consequently, the functions which have been delegated by the President to the Board pursuant to the Defense Production Act of 1950 are performed subject to the direction, control, and coordination of the Director of Defense Mobilization. By Executive Order No. 10200 of January 3, 1951, there was established a Defense Mobilization Board to advise the Director of Defense Mobilization, and the Chairman of the Board of Governors of the Federal Reserve System is a member of that Board.

8. Are (*a*) the Board of Governors and (*b*) the Federal Open Market Committee parts of the Executive Branch of the United States Government? If not, what is their status? Discuss with respect to the constitutional issues involved as you understand them.

The courts have not had occasion to determine in which of the three branches of the United States Government the Board of Governors and the Federal Open Market Committee should be classified. Irrespective of the branch of Government in which they may be deemed to fall, however, these agencies have been established by Congress to exercise important and unique functions of Government—generally described as reserve banking functions—which relate to the regulation in the public interest of the volume, availability, and cost of money; and, recognizing the need for independence of judgment in the exercise of these functions, Congress has indicated its intent that the Board and the Committee shall act according to their own best judgment and discretion, subject always to the limitations and policy directives prescribed by the law.

Credit and monetary functions, like the functions of the judiciary, depend for their effective performance upon impartial and objective judgment.

The country cannot prosper without a sound basic economy and sound credit conditions. To maintain such conditions, it is essential that money—the "medium of exchange" by which goods and services change hands—must adequately and flexibly serve its purpose in a complex economy. To this end, some Government agency must be given the responsibility, under appropriate Congressional authority, for influencing the volume and availability of money in the public interest; and it is this responsibility which is vested in reserve banking authorities. Through instruments of credit policy, such as the fixing of discount rates, open market operations, and the determination of bank reserve requirements, these authorities can, within limits set by law, restrict credit during inflationary periods and conversely make it more readily available during periods of depression.

Because money so vitally affects all people in all walks of life as well as the financing of the Government, the task of credit and monetary management has unique characteristics. Policy decisions of an agency performing this task are often the 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.

Historical background

There is a long-established tradition both in this country and in other democracies[a] that the proper exercise of reserve banking functions requires that it be insulated against private or public pressures whose immediate interests may not coincide with the best long-run interests of the country.

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[a] For a treatment of the current relationships of central banks to foreign governments, see the answer to Question G–51.

When the First Bank of the United States was chartered by Congress in February 1791,[4] it was placed under private management, except for ownership of some of its stock by the Government and for the furnishing of periodic statements to the Secretary of the Treasury. Hamilton expressed the view that "it would, indeed, be little less than a miracle should the credit of the Bank be at the disposal of the Government, if, in a long series of time, there was not experienced a calamitous abuse of it."[5]

The First Bank's charter expired in 1811, and a new charter was granted by statute to the Second Bank of the United States in 1816. A certain element of Executive influence was provided for in the charter of the new Bank by a provision authorizing the President to appoint 5 of the 25 directors of the Bank, but otherwise the Second Bank, like its predecessor, was not subject to Executive direction. Even with respect to the limited authority of the President to appoint directors, both those who favored and those who opposed that right recognized the need for maintaining the independence of the Bank. Thus, John Randolph, who objected to the proposal, stated:[6]

> The objection was vital; that it would be an agency of irresistible power in the hands of any Administration; that it would be in politics and finance what the celebrated proposition of Archimedes was in physics—a place, the fulcrum from which, at the will of the Executive, the whole nation could be hurled to destruction, or managed in any way at his will and discretion.

One of the principal proponents of the proposal was Secretary of the Treasury Dallas; even he, however, took pains to point out that his proposal would not inject undue Executive influence into the administration of the Bank.[7]

When a proposal for the establishment of a Treasury Bank was advanced in 1830, the House Ways and Means Committee felt that such a Government Bank would invest the Executive Branch of the Government "with a weight of moneyed influence more dangerous in character, and more powerful in its operation, than the entire mass of its present patronage."[8] The Committee felt also that such a Bank "would have scarcely any faculty of resistance when appeals for indulgence should come from all quarters of the Union, sustained by the strong plea of public distress and embarrassment", and that "the temptation to supply the Federal Treasury by the easy process of bank issues, rather than resort to the unpopular process of internal taxation, would be too fascinating to be resisted."[9]

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[4] 1 Stat. 191.

[5] Hamilton's Report on a National Bank, 2 Annals of Congress 2051.

[6] 29 Annals of Congress 1111 (1816).

[7] In a letter to Calhoun, then Chairman of the House Committee on a National Currency, Secretary Dallas stated: "An apprehension has sometimes been expressed, lest the power of the Government, thus inserted into the administration of the affairs of the bank, should be employed eventually to alienate the funds and destroy the credit of the institution. * * * there can be no reasonable cause for the apprehension here. * * * Whatever accommodation the Treasury may have occasion to ask from the bank, can only be asked under the licence of a law; and whatever accommodation shall be obtained, must be obtained from the voluntary assent of the directors, acting under the responsibility of their trust." (Clarke and Hall, Bank of the United States, p. 616) Again, in answer to Webster's statement "that to be useful a bank must be independent of Government," Grosvenor insisted that "the power of appointing directors could not give to Government the influence which Mr. Webster apprehended. * * * He should deprecate as much as Mr. Webster a real Government Bank." (29 Annals of Congress 1213.)

[8] 6 Register of Debates in Congress, Pt. II, Appendix, p. 132.

[9] *Ibid.*, p. 131. Ex-President Monroe expressed views to the same effect: "A bank thus instituted, being under the control of the executive, by the appointment of its directors, and in all its operations, might, in the hands of a bad administration, be wielded as an instrument to sap the foundation of the Government itself." (Niles' Register, XLI, 82.)

Intent of the Federal Reserve Act

The framers of the Federal Reserve Act in 1913 clearly had in mind the same principles regarding the independent exercise of credit and monetary functions as those which had motivated Congress in the early days of the Republic. This is indicated by the legislative history of the Act.

In the report of the House Banking and Currency Committee on the original Act, Chairman Carter Glass stated:[10]

> It cannot be too emphatically stated that the Committee regards the federal reserve board as a distinctly nonpartisan organization whose functions are to be wholly divorced from politics.

Commenting upon the importance of the Board's functions, Senator Owen, who was the chief sponsor of the Federal Reserve Act in the Senate, stated during the debates:[11]

> I need not say, Mr. President, that no one can have any doubt that the members of the Federal reserve board should be men of the most distinguished attainments, men who should rank favorably in comparison with members of the Supreme Court of the United States, because in reality this Federal reserve board will be a supreme court of American finance, safeguarding the commercial interests of this Nation, protecting our gold reserve, protecting our banking system, protecting our commercial system, protecting the individual credit of the private citizen, and giving him a fair deal in the struggle of commercial and business life, and seeing to it that every citizen shall receive the just amount of credit to which he is entitled by character and by resources.

In the course of the debates, there was much discussion of the suggestion that the bankers of the country should have a part in selecting the members of the Board. This suggestion was definitely rejected on the theory that the members of the Board should not be chosen by those whom it would be expected to regulate and supervise.[12] There was also considerable discussion of the possible influence which the President might have upon the exercise of the Board's functions. Denying that the President would have such influence, Mr. Barkley stated on the floor of the House:[13]

> There is no board until the President appoints one, and the act of appointment and the manner of appointment are not similar nor coextensive with the acts of the board after they are appointed. The President does not control the action of the Federal Reserve Board after they are appointed any more than he controls the action of the Interstate Commerce Commission after he appoints its members.

Speaking of the provision giving members of the Board staggered terms, Representative Temple pointed out that an incoming President—

> will be 3 years in office before he will appoint four out of the seven members, and unless he should appoint a Comptroller of the Currency he will appoint during his whole term only three out of the seven members. This change in the bill practically takes the Federal Reserve System out of politics.[14]

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[10] H. Rept. No. 69, p. 43, 63d Cong. At another point in the report Mr. Glass observed that for "obvious reasons it is deemed best that the Board shall annually report to the House of Representatives, thereby establishing a direct relationship between the Board and the Congress". (p. 44.)

[11] Cong. Rec., Vol. 50, p. 5998, Nov. 24, 1913.

[12] It was pointed out that there was no more reason for bankers to choose members of the Board than for the lawyers to choose members of the Supreme Court or railroad officials to select the Interstate Commerce Commissioners. (Congressional Record, Vol. 50, p. 4843.)

[13] Congressional Record, Vol. 50, p. 4789, Sept. 12, 1913.

[14] Congressional Record, Vol. 51, p. 1459.

During the debates it was emphasized that the Board should be a nonpartisan agency which would represent and be responsible to the people of the United States. Thus, Mr. Borland stated:[15]

> * * * The Glass plan provides for a central board of public officials, who have no private interests to serve, but whose sole duty is to represent the people of the United States in enforcing the law and preserving equality, soundness, and solvency in commercial banking.

The provisions of the original Federal Reserve Act obviously contemplated a high degree of independence for members of the Board. Thus, in addition to the requirement that they shall be appointed only with the consent of the Senate, it gave them 10-year terms,[16] provided for the staggered expiration of terms so that there would be occasion for the appointment of a new member only once every two years, and made them removable by the President only "for cause". The length of the term of office was extended to 12 years by the Banking Act of 1933, and was further extended to 14 years by the Banking Act of 1935.

Constitutional considerations

As the result of early decisions of the Supreme Court of the United States upholding the power of Congress to establish the Bank of the United States as "a convenient, a useful, and essential instrument in the prosecution of its fiscal operations",[17] it is now well settled that Congress has constitutional authority to employ any means appropriate for carrying out its credit and monetary powers—its powers "to coin money" and "regulate the value thereof", "to borrow money on the credit of the United States", and "to lay and collect taxes".

In 1913, in order "to furnish an elastic currency" and for other monetary purposes, Congress enacted the Federal Reserve Act. Instead of utilizing one of the executive departments as it might have done or a single central bank as had been done in foreign countries, Congress established the Federal Reserve System, consisting of 12 regional banks operated for public purposes and subject to the overall supervision of a governing board which was described by the Attorney General shortly after the passage of the law as "an independent board or government establishment".[18]

In considering the question whether this or any other Government establishment created by Congress should be placed in the legislative, executive, or judicial branch of the Government, it should be borne in mind that the constitutional doctrine of separation of powers as between the three branches of the Federal Government is not a rigid but a flexible and qualified doctrine which is often difficult to apply to particular cases. Chief Justice Marshall in an early case observed that "the difference between the departments undoubtedly is, that the legislature makes, the executive executes, and the judiciary construes the law."[19] Frequently, however, these powers merge into one another

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[15] Congressional Record, Vol. 50, p. 4730, Sept. 11, 1913. Similarly, Mr. Phelan stated: "The supreme oversight and control of the whole system * * * is vested in a board representing the public." (Congressional Record, Vol. 50, p. 4673.)

[16] It is of interest here that when the Comptroller General's office was set up in 1921 and consideration was being given to his term of office, one member of Congress compared that office with membership on the Federal Reserve Board in that "both classes of officials have important duties to perform, which are strictly nonpolitical, and they should be entirely removed from politics." (Congressional Record, Vol. 61, p. 1081.)

[17] *McCulloch* v. *Maryland,* 4 Wheat. 316, 422 (1819). See also *Osborn* v. *Bank of the United States,* 9 Wheat. 738 (1824).

[18] 30 Op. Atty. Gen. 308, 311 (1914).

[19] *Wayman* v. *Southard,* 23 U. S. 1, 44 (1825).

and it is not always possible to say definitely whether a particular power is executive, legislative, or judicial. Moreover, even if the nature of a particular power can be determined, it is clear that the separation of powers doctrine does not demand the drawing of sharp lines of demarcation between the powers of the three branches of Government, but recognizes that these powers may be blended and interconnected.[20]

In some cases, Congress has created Government agencies which perform rule-making functions as agents of the legislative authority and which also exercise functions quasi-judicial in nature. The Board of Governors of the Federal Reserve System is such an agency.

The most important functions of the Board are those affecting the money supply. Among these are the Board's authority to review and determine the discount rates established by the Reserve Banks with a view to accommodating commerce and business; to change the reserve requirements of member banks in order to prevent injurious credit expansion or contraction; and to prescribe such margin requirements with respect to securities as it deems appropriate for the accommodation of commerce and industry "having due regard to the general credit situation of the country." In the same category are the responsibilities imposed upon the Federal Open Market Committee for directing the open market operations of the Federal Reserve Banks with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation of the country. In these and other respects, the Board and the Open Market Committee prescribe rules and determine policies as agents and on behalf of the legislative branch. On the other hand, certain of the Board's functions are quasi-judicial in nature, such as those which it has in connection with administrative hearings and decisions. On the basis of the nature of its functions it may be that for certain purposes the Board can be regarded as an agency of one branch of the Government and for other purposes as an agency of another branch.

The power of Congress to establish agencies to perform quasi-judicial or quasi-legislative functions is unquestioned. It is also clear that Congress may constitutionally vest such agencies with authority to exercise independent judgment in discharging their duties.

In the case of *Humphrey's Executor* v. *United States*,[21] holding that Congress could constitutionally restrict the Presidential power of removal as to members of the Federal Trade Commission, the Supreme Court of the United States expressly declared that "the authority of Congress, in creating quasi-legislative or quasi-judicial agencies, to require them to act in discharge of their duties independently of executive control cannot well be doubted." [22]

In this connection, the Supreme Court stated: [23]

> The Federal Trade Commission is an administrative body created by Congress to carry into effect legislative policies embodied in the statute in accordance with the legislative standard therein prescribed, and to perform other specified duties as a legislative or as a judicial aid. *Such a body cannot in any proper sense*

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[20] As stated in the Federalist Papers, unless the three branches of the Government "be so far connected and blended as to give to each a constitutional control over the others, the degree of separation which the maxim requires, as essential to a free Government, can never in practice be duly maintained". (Essay No. 48.)

[21] 295 U. S. 602 (1935).

[22] 295 U. S. 629.

[23] 295 U. S. 602, 628.

be characterized as an arm or an eye of the executive. Its duties are performed without executive leave and, in the contemplation of the statute, must be free from executive control. * * * [Italics supplied.]

Regarding the intent of Congress in enacting the Trade Commission Act, the Supreme Court declared:[24]

Thus, the language of the act, the legislative reports, and the general purposes of the legislation as reflected by the debates, all combine to demonstrate the Congressional intent to create a body of experts who shall gain experience by length of service—a body which shall be independent of executive authority, *except in its selection,* and free to exercise its judgment, without the hindrance of any other official or any department of the Government * * * [Italics in original.]

The Board of Governors, of course, operates in a different field from that of the Trade Commission and with respect to different subject matters. As previously indicated, however, in performing many of its most important functions, the Board exercises rule-making powers as the agent of the legislative authority; and in certain other respects the Board performs quasi-judicial functions. The Federal Reserve Act and its legislative history show the intent of Congress that the Board shall exercise its own judgment and discretion in performing its duties. Consequently, if occasion should ever arise for judicial determination of the status of the Board, it would appear that, if the principle of the Humphrey's case is followed, the courts would hold that the Board is authorized to carry out its important reserve banking functions in accordance with its own independent judgment, "free from executive control".

In any event, irrespective of the branch of Government in which judicial determination might place the Board and the Open Market Committee, such determination would not affect their authority to exercise the discretion vested in them by Congress. Where officials of the Government, including those in the Executive Branch, are charged by law with the performance of duties involving the exercise of discretion, the courts have held that the decisions of such officials are not subject to review or revision by the President. While it is the President's duty under the Constitution to "take care that the laws be faithfully executed," nevertheless, as stated by the Supreme Court in an early case,

* * * it by no means follows [from the President's duty to "take care," etc.] that every officer in every branch of that [executive] department is under the exclusive direction of the President. * * *

* * * * * * *

* * * it would be an alarming doctrine that Congress cannot impose upon any executive officer any duty they may think proper, which is not repugnant to any right secured and protected by the Constitution; and in such cases the duty and responsibility grow out of and are subject to the control of the law, and not to the direction of the President.[25]

Conclusion

In the absence of an authoritative court decision on the subject, no definitive answer can be given to the question submitted as to the

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[24] 295 U. S. at p. 625.

[25] *Kendall* v. *United States,* 12 Peters 610 (1838). This principle has often been recognized by the courts, the Attorney Generals, and the Presidents themselves. As early as 1823, Attorney General Wirt stated: "But the requisition of the constitution is, that he [the President] shall *take care* that the *laws* be executed. If the laws, then, require a particular officer by name to perform a duty, not only is that officer bound to perform it, but no other officer can perform it without a violation of the law; and were the President to perform it, he would not only be not taking care that the laws were faithfully executed, but he would be violating them himself." 1 Op. Atty. Gen. 624, 625 [Italics in original.]

particular branch of Government in which the Board and the Open Market Committee may fall. Regardless of what answer may be given to this question, however, it would not affect the authority and duty of the Board and the Committee to exercise their own best judgment and discretion, subject to the statutory restrictions and mandates imposed by Congress, in performing their responsibilities under the law.

This is not to say, of course, that the Board and the Open Market Committee are not parts of the Federal Government or that they are intended to function entirely apart from and without regard to other agencies of the Government. On the contrary, they seek always to consider the policies of agencies functioning in related fields, as well as the programs and policies of the President, to the end that the policies of the Federal Reserve System and other Government agencies may be integrated to the greatest extent practicable. They also endeavor to cooperate with other agencies in considering common problems and in exchanging helpful information.

What has been said above as to the independent status of the Board and the Committee should not be interpreted as implying that the Federal Reserve System is a static or immutable organization. The System should be, and it is believed that it has been, a flexible institution with capacity for growth and adaptation to new developments. It has been and should be modified by Congress from time to time to conform to changing conditions. In this respect Chief Justice Marshall's words that the Constitution was intended "to be adapted to the various crises of human affairs" [26] might well be applied to the Federal Reserve System. In whatever ways it may be modified or adapted to changing conditions, it is essential to the effective performance of the System's unique functions that the independence of judgment reposed by Congress in the Board and the Open Market Committee be preserved.

9. Trace the background of the provisions in the law for (*a*) a Board of Directors at each Federal Reserve Bank and branch and (*b*) for the presidents as the chief executive officers of the Banks. Discuss the functions of each in the formulation of national credit policies and in the administration of the Federal Reserve Banks.

(*a*) *Board of Directors of Federal Reserve Banks and branches*

One of the principal points of controversy during the debates on the Federal Reserve Act which became law in 1913 was whether there would be a single reserve bank with branches or a regional organization composed of separate reserve banking institutions which would be "individually organized and individually controlled, each holding the fluid funds of the region in which it is organized and each ordinarily dependent upon no other part of the country for assistance." [27] As to the functions of the individual Reserve Banks and the manner in which they would be supervised by the Federal Reserve Board, the House Report on the bill stated:

* * * The only factor of centralization which has been provided in the committee's plan is found in the Federal reserve board, which is to be a strictly

[26] *McCulloch* v. *Maryland,* 4 Wheat. 315, 415.
[27] H. Rept. No. 69, p. 18, 63d Cong.

Government organization created for the purpose of inspecting existing banking institutions and of regulating relationships between Federal reserve banks and between them and the Government itself. Careful study of the elements of the problem has convinced the committee that every element of advantage found to exist in cooperative or central banks abroad can be realized by the degree of cooperation which will be secured through the reserve-bank plan recommended, while many dangers and possibilities of undue control of the resources of one section by another will be avoided. Local control of banking, local application of resources to necessities, combined with Federal supervision, and limited by Federal authority to compel the joint application of bank resources to the relief of dangerous or stringent conditions in any locality are the characteristic features of the plan as now put forward. * * * It is proposed that the Government shall retain a sufficient power over the reserve banks to enable it to exercise a directing authority when necessary to do so, but that it shall in no way attempt to carry on through its own mechanism the routine operations of banking which require detailed knowledge of local and individual credit and which determine the actual use of the funds of the community in any given instance. * * *

When the Federal Reserve Act was being debated in the Senate in December 1913, Senator Reed of Missouri, commenting on the supervisory powers of the Federal Reserve Board, expressed the opinion that the "plan combines the advantages of governmental control with some of the advantages of private business management."

To make possible the individual administration of the Reserve Banks envisaged by Congress, the Act provided that each Bank should have a board of nine directors. Of the six directors elected by the member banks of the district, three may be bankers. The other three must be actively engaged in the district in commerce, agriculture, or some other industrial pursuit and are not permitted to be officers, directors, or employees of any bank. The remaining three directors, including the chairman and deputy chairman of the Board of Directors, are appointed by the Board of Governors and are not permitted to be officers, directors, employees, or stockholders of any bank.

Selection of directors in this manner assures a diversity of background and experience in the policy and administrative decisions of the Reserve Banks. Each director's training and experience as banker, businessman, farmer, educator, or professional man provide qualifications for participation with others of different background and experience in dealing with credit problems that affect all phases and walks of life.

The Act contemplated that each Federal Reserve Bank would be thoroughly familiar with the economic conditions and activities in its own district and consequently would be in a position to pursue credit and operating policies which, while promoting sound credit conditions, would also be closely tailored to meet the needs of business, industry, and agriculture in the district. It was expected that the Reserve Bank would influence credit conditions in its area especially through changes in its own discount rate and its ability to meet seasonal credit needs in its district. The function and mechanism of open market operations and their relation to discount operations were not envisaged at the time, since the instrument was new to American financial organization. However, as described in the reply to Question C-16, major changes in the economy and the money market, as well as in the size of the public debt, over the intervening years have made this instrument a major means of System credit and monetary policy, the administration of which has been lodged by Congress in the Federal Open Market Committee.

In addition, the authority granted by Congress to the Federal Reserve Board in 1933 and in more workable form in 1935 to change reserve requirements of member banks, in 1934 to limit the use of credit for the purchasing and carrying of securities, and at various times during and since the war to regulate consumer credit, increased the instruments available for carrying out national credit policies. They were further increased in 1950 by delegation from the President under the Defense Production Act of authority to regulate real estate credit and to initiate a voluntary credit restraint program. The effect of these changes has been to enlarge the responsibility of the Board of Governors for the initiation and development of credit and monetary policies.

Although these developments have modified the role of the boards of directors of the Federal Reserve Banks in the formulation of System credit policies, they are still charged by law with important tasks. Under the provisions of section 14 (d) of the Federal Reserve Act, they are authorized to initiate changes in discount rates. They also have the responsibility for administration of the discount and lending operations of the Reserve Banks. Section 4 of the Federal Reserve Act requires that the boards of directors shall administer the affairs of the Reserve Banks fairly and impartially and without discrimination in favor of or against any member bank and, subject to applicable law and the orders of the Board of Governors, the Banks may extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard to the claims of other member banks, the maintenance of sound credit conditions, and the accommodation of commerce, industry, and agriculture. Each Bank is required to keep itself informed of the general character and amount of loans and investments of its member banks with a view to ascertaining whether undue use is being made of bank credit for speculative or other purposes inconsistent with the maintenance of sound credit conditions. Section 13b of the Federal Reserve Act authorizes the Reserve Banks, subject to the regulations of the Board, to extend credit in exceptional circumstances to established industrial or commercial concerns for working capital purposes, and the directors have responsibility for the supervision of these operations. Under section 12 of the Federal Reserve Act the boards of directors also appoint the members of the Federal Advisory Council which consists of a representative banker from each of the 12 Federal Reserve districts to advise and make recommendations to the Board of Governors on matters of interest to the System.

The contribution that the Reserve Bank and branch directors are in a position to make to the execution of national credit and monetary policies does not end with these specific responsibilities. They are outstanding men in their communities who are in close contact with banking and business conditions in their respective districts. They include successful operators of banks, manufacturing and processing concerns, farms, department stores, and various other enterprises, as well as men prominent in the field of education or the law.[28] Thus they are able to bring to the deliberations of the System the benefit of broad experience and training at a very high level and to perform an essential service in supplying judgment and advice on the credit problems of their respective districts and on other important problems confronting the System as a whole. In the formulation of national policy, the Board and the Open Market Committee have a unique advantage in being able to obtain information on conditions in their respective districts directly from the more than 250 directors who are representatives of diverse fields of endeavor in all sections of the United States. Though the directors may not make their views prevail on national credit and monetary policy, it is their duty to inform the Board and the Open Market Committee on national credit developments as they see them from their varying vantage points and to execute in their districts fairly, impartially, and as effectively as possible the credit and monetary policies decided upon by the System.

When a System policy has been determined, Reserve Bank directors are in a position and have a duty to interpret that policy to interested people in their respective districts. It is important that System policies and the reasons therefor be understood by businessmen, bankers, and others. The greater the understanding, the greater is the likelihood that the sound features of such policies will be accepted and supported and, conversely, that defects in such policies will be pointed out. For these and other reasons, it is important that men of competence and broad experience continue to serve as directors of the Federal Reserve Banks.

The branches of the Federal Reserve Banks have been established for the purpose of providing more effective services to member banks in their respective areas than would be possible if the branches did not exist, and the boards of directors of the branches were provided by law for the purpose of making these localized services as efficient and effective as possible. The branch directors also have a duty to contribute advice on current credit trends and to promote understanding of System policies in much the same manner as directors at the head offices.

Although the Board of Governors is authorized to exercise general supervision over the Reserve Banks and is required to approve the appointment of the President and First Vice President of each Bank and the salaries of all officers and employees, the primary responsibility for selection of officers, for day-to-day operation of the Banks and for long-range planning of Reserve Bank operations in a growing economy, rests under the law with the boards of directors. Having had broad business and professional experience they are in a position to give informed judgments on problems of organization, management, and operation.

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[28] Of the 105 men who on December 31, 1951, were head office directors of the Federal Reserve Banks, 35 were bankers, 31 were in various kinds of manufacturing, 9 were farmers, dairymen, or livestock men, 6 were department store operators or distributors, 7 were leaders in education, 3 were oil producers and refiners, 4 were lawyers, 2 were public utility executives, 1 was associated with an agricultural cooperative, 1 was a business executive, and the remaining 6 were engaged respectively in engineering and contracting, publishing, real estate, shipbuilding, importing and exporting, and as a representative of a national farm organization. A list of the directors of the Federal Reserve Banks and branches and their principal business affiliations is attached (Table II, p. 254).

The procedure followed in the preparation of budgets and the control of expenses of Federal Reserve Banks is described in the reply to Question E-24. Here, it is of interest merely to point out that the boards of directors of the Reserve Banks, in passing upon the Reserve Bank budgets, are able to bring to bear their business and professional experience in holding down costs in a competitive economy. They also are aware of the fact that, although the Reserve Banks are not operated for profit and their earnings are large at the present time, there is every reason for keeping expenses at a minimum consistent with the Banks' operating and other responsibilities.

A similar situation exists with respect to the selection of officers and their salaries. The directors have responsibility for the internal alignment of officers' responsibilities and, operating usually through a salary or personnel committee, give special consideration to this problem and to the salaries that should be paid. Again, being cognizant of the need for efficient management in their own businesses, their salary recommendations reflect judgments based on high-level experience and training.

In each Reserve Bank there is an auditing committee of the board of directors, and the auditors of the Bank report directly to this committee or to the chairman of the board of directors. The auditing department works closely with the Board's examiners who make an examination of each Federal Reserve Bank once each year and determine the adequacy of audit procedures, so that there is every assurance that the authorized expenditures of the Reserve Banks are adequately controlled and in accordance with authorizations.

b. Presidents of Reserve Banks as chief executive officers

The original Federal Reserve Act provided for a chairman of the board of directors of the Federal Reserve Bank who, in his capacity as Federal Reserve Agent stationed at the Reserve Bank, should maintain a local office of the Board of Governors on the premises of the Bank and should make regular reports to the Board and act as its official representative for the performance of the functions conferred upon the Board by the Act. It is clear, however, from the first annual report of the Federal Reserve Board that it did not interpret the law as requiring that the Chairman and the Federal Reserve Agent be the chief executive officer of the Bank. It is stated in that report that as soon as the directors of the respective Banks had been chosen the Board particularly enjoined on them the choice of a suitable chief executive officer with the suggestion that this officer be given the title of Governor in order to differentiate his functions from those of the president of a member bank. This suggestion was carried out with the result that there was at each Federal Reserve Bank both a full-time salaried Chairman, who was also Federal Reserve Agent, and a Governor.

In the succeeding years this arrangement resulted at times in conflicts between the two officers, and in order to correct the situation the Banking Act of 1935 amended the law to provide for a President as the chief executive officer who would be appointed by the directors with the approval of the Board of Governors for a term of five years. Following the passage of the Banking Act of 1935 the Board of Governors adopted a policy of placing the Chairmen of the Federal Reserve Banks on a basis comparable to that of the other directors and of transferring to the operating department of the Bank as many as practicable of the duties previously performed in the office of the Chairman and Federal Reserve Agent. It has thus been possible to command the services of exceptional men who could not have been engaged to serve as Chairmen on a full-time basis.

Administration of a Reserve Bank as an institution to supply currency and to perform check clearing and other service functions, or as fiscal agent of the United States in carrying out duties such as the issuance and retirement of Government securities, is in itself a very responsible job, but it represents only a small part of the duties that the President is called upon to carry out.

As chief executive officer, the President has responsibility under such directions as are given by the board of directors, for the executive operation of the Bank. He makes reports to the board of directors with respect to all matters with which the directors are concerned. As a means of providing an opportunity to discuss policy and operating subjects and achieving desirable standardization of operating and management policies, the Presidents are organized in a Presidents' Conference which meets several times each year. The President of the Federal Reserve Bank of New York is a continuous member of the Federal Open Market Committee, which determines the open market policies of the System, and the Presidents of four other Reserve Banks serve on a basis of rotation as members of that Committee.[29] This and related responsibilities in the field of credit and monetary policy call for exceptional qualifications.

With these responsibilities, the Presidents of the Federal Reserve Banks occupy an important position in the organizational structure of the Reserve System and their duties go far beyond efficient direction of the operating functions of the Reserve Banks. They are required to be closely in touch with banking and credit conditions in their districts, with the requirements of banks for reserves with which to meet the credit needs of their customers, and with the extent to which and the conditions under which such reserves should be supplied. As members or prospective members of the Federal Open Market Committee they are required to be fully familiar with the over-all credit policies of the System and the actions that might be taken to contribute to economic stability and to enable the banking system not only to meet the every-day demands made upon it but demands growing out of emergency conditions such as exist at the present time.

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[29] The role of the Reserve Bank presidents in System credit policy is also discussed in the replies to Questions C-16, C-17, and C-18.

TABLE II

Directors of the Federal Reserve Banks and their principal business affiliation

FEDERAL RESERVE BANK OF BOSTON

Name	Business affiliation	Service began
Russell H. Britton	Executive vice president and cashier, First National Bank of Rochester, N. H.	Jan. 1, 1949
Earle W. Stamm	President, The National Bank of Commerce of New London, Conn.	Oct. 15, 1947
Lloyd D. Brace	President, The First National Bank of Boston, Mass	Jan. 1, 1951
Frederick S. Blackall, Jr	President and treasurer, The Taft-Peirce Manufacturing Co., Woonsocket, R. I.	May 2, 1946
Roy L. Patrick	President, Rock of Ages Corp., Burlington, Vt	July 6, 1944
Harvey P. Hood	President, H. P. Hood & Sons, Inc., Boston, Mass	Jan. 1, 1951
Ames Stevens [1]	President, Ames Worsted Co., Lowell, Mass	July 26, 1948
Harold D. Hodgkinson [2]	Vice president, general manager and chairman of Management Board, Wm. Filene's Sons Co., Boston, Mass.	Jan. 1, 1947
Karl T. Compton	Chairman, Massachusetts Institute of Technology, Cambridge, Mass.	Feb. 2, 1951

FEDERAL RESERVE BANK OF NEW YORK

Roger B. Prescott	President, The Keeseville National Bank, Keeseville, N. Y.	Jan. 1, 1949
John C. Traphagen	Chairman of the board, Bank of New York and Fifth Avenue Bank, New York, N. Y.	Jan. 1, 1950
Burr P. Cleveland	President, First National Bank of Cortland, N. Y	Jan. 1, 1951
Jay E. Crane	Vice president, Standard Oil Co. (N. J.), New York, N. Y.	Jan. 1, 1949
Clarence Francis	Chairman of the board, General Foods Corp., New York, N. Y.	May 4, 1951
Marion B. Folsom	Treasurer and director, Eastman Kodak Co., Rochester, N. Y.	July 15, 1949
William I. Myers [1]	Dean, New York State College of Agriculture, Cornell University, Ithaca, N. Y.	Jan. 1, 1943
Robert P. Patterson	Member of the firm of Patterson, Belknap & Webb, attorneys at law, New York, N. Y.	Apr. 24, 1950
Robert T. Stevens [2]	Chairman of the board, J. P. Stevens & Co., Inc., New York, N. Y.	May 14, 1948

FEDERAL RESERVE BANK OF PHILADELPHIA

George W. Reily	President, Harrisburg National Bank, Harrisburg, Pa	Jan. 1, 1928
J. Nyce Patterson	President, Watsontown National Bank, Watsontown, Pa.	Jan. 1, 1950
Archie D. Swift	Chairman of board, Central-Penn National Bank, Philadelphia, Pa.	Jan. 1, 1948
Albert G. Frost	Chairman of board, The Esterbrook Pen Co., Camden, N. J.	Jan. 1, 1946
Charles E. Oakes	President and director, Pennsylvania Power & Light Co., Allentown, Pa.	Nov. 15, 1951
Warren C. Newton	President, O. A. Newton & Son Co., Bridgeville, Del	Jan. 1, 1951
William J. Meinel	Chairman and president, Heintz Manufacturing Co., Philadelphia, Pa.	Aug. 6, 1951
Warren F. Whittier [2]	Agricultural consultant, Chester Springs, Pa	Dec. 2, 1939
C. Canby Balderston [1]	Dean, Wharton School of Finance and Commerce, University of Pennsylvania, Philadelphia, Pa.	Apr. 8, 1943

FEDERAL RESERVE BANK OF CLEVELAND

Ben R. Conner	President, The First National Bank of Ada, Ohio	July 29, 1932
John D. Bainer	President, The Merchants National Bank & Trust Co. of Meadville, Pa.	June 13, 1947
Lawrence N. Murray	President, Mellon National Bank & Trust Co., Pittsburgh, Pa.	Jan. 1, 1951
Joel M. Bowlby	Chairman of the board, The Eagle Picher Co., Cincinnati, Ohio.	Dec. 31, 1947
Edward C. Doll	President, Lovell Manufacturing Co., Erie, Pa	Jan. 1, 1950
Charles J. Stilwell	President, The Warner & Swasey Co., Cleveland, Ohio	Jan. 1, 1951
Leo L. Rummell	Dean, College of Agriculture, The Ohio State University, Columbus, Ohio.	Jan. 1, 1949
George C. Brainard [2]	President, Addressograph-Multigraph Corp., Cleveland, Ohio.	Aug. 1, 1936
John C. Virden [1]	Chairman of the board, John C. Virden Co., Cleveland, Ohio.	Jan. 1, 1951

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Directors of the Federal Reserve Banks and their principal business affiliation—Continued

FEDERAL RESERVE BANK OF RICHMOND

Name	Business affiliation	Service began
James D. Harrison	President, First National Bank of Baltimore, Md	Jan. 1, 1946
Warren S. Johnson	President, Peoples Savings Bank & Trust Co., Wilmington, N. C.	Jan. 1, 1947
John A. Sydenstricker	Executive vice president and cashier, First National Bank in Marlinton, W. Va.	Jan. 1, 1942
Edwin Hyde	Executive vice president, Miller & Rhoads, Inc., Richmond, Va.	Jan. 4, 1951
H. L. Rust, Jr	President, H. L. Rust Co., Washington, D. C	Jan. 1, 1944
Cary L. Page	President and treasurer, Jackson Mills, Wellford, S. C	Jan. 1, 1948
W. G. Wysor	Management counsel, Southern States Cooperative, Inc., Richmond, Va.	Jan. 8, 1937
John B. Woodward, Jr.[1]	President, Newport News Shipbuilding & Dry Dock Co., Newport News, Va.	Jan. 1, 1949
Charles P. McCormick[2]	President and chairman of board, McCormick & Co., Inc., Baltimore, Md.	Aug. 31, 1939

FEDERAL RESERVE BANK OF ATLANTA

Name	Business affiliation	Service began
R. C. Williams	President, The First National Bank of Atlanta, Ga	Jan. 1, 1946
Leslie R. Driver	President, The First National Bank in Bristol, Tenn	Jan. 1, 1950
Roland L. Adams	President, Bank of York, York, Ala	Jan. 1, 1951
J. A. McCrary	Vice president and treasurer, J. B. McCrary Co., Inc., Atlanta, Ga.	Nov. 16, 1914
Donald Comer	Chairman of the board, Avondale Mills, Birmingham, Ala.	Apr. 17, 1946
A B. Freeman	Chairman of the board, Louisiana Coca-Cola Bottling Co., Ltd., New Orleans, La.	Jan. 1, 1948
Paul E. Reinhold	President, Foremost Dairies, Inc., Jacksonville, Fla	Jan. 1, 1949
Rufus C. Harris[1]	President, The Tulane University of Louisiana, New Orleans, La.	Jan. 28, 1938
Frank H. Neely[2]	Chairman of the board, Rich's, Inc., Atlanta, Ga	Dec. 30, 1936

FEDERAL RESERVE BANK OF CHICAGO

Name	Business affiliation	Service began
Walter J. Cummings	Chairman, Continental Illinois National Bank & Trust Co. of Chicago, Ill.	Jan. 1, 1937
Horace S. French	President, The Manufacturers National Bank of Chicago, Ill.	Jan. 1, 1944
Vivian W. Johnson	President, First National Bank, Cedar Falls, Iowa	Jan. 1, 1945
Wm. C. Heath	Chief executive officer, A. O. Smith Corp., Milwaukee, Wis.	May 18, 1943
William J. Grede	President, Grede Foundries, Inc., Milwaukee, Wis	Apr. 22, 1947
Nicholas H. Noyes	Chairman, finance committee, Eli Lilly & Co., Indianapolis, Ind.	Jan. 1, 1933
F. J. Lunding[2]	Chairman of the executive committee, Jewel Tea Co., Inc., 135 South La Salle St., Chicago, Ill.	Jan. 1, 1949
John S. Coleman[1]	President, Burroughs Adding Machine Co., Detroit, Mich.	Jan. 1, 1950
Allan B. Kline	President, American Farm Bureau Federation, Chicago, Ill.	Jan. 1, 1948

FEDERAL RESERVE BANK OF ST. LOUIS

Name	Business affiliation	Service began
Phil E. Chappell	President, Planters Bank & Trust Co., Hopkinsville, Ky.	Jan. 1, 1946
J. E. Etherton	President, Carbondale National Bank, Carbondale, Ill	Jan. 1, 1950
William A. McDonnell	President, First National Bank in St. Louis, Mo	Jan. 1, 1951
M. Moss Alexander	President, Missouri Portland Cement Co., St. Louis, Mo.	Jan. 1, 1949
Ralph E. Plunkett	President, Plunkett-Jarrell Grocer Co., Little Rock, Ark.	Jan. 1, 1950
Louis Ruthenburg	Chairman of board, Servel, Inc., Evansville, Ind	Jan. 1, 1945
Joseph H. Moore	Farming, Charleston, Mo	Mar. 14, 1950
Russell L. Darmont[2]	Chief counsel for trustee, Missouri-Pacific Lines, St. Louis, Mo.	Dec. 7, 1945
Wm. H. Bryce[1]	Vice president and director, Dixie Wax Paper Co., Memphis, Tenn.	Mar. 22, 1948

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Directors of the Federal Reserve Banks and their principal business affiliation—Continued

FEDERAL RESERVE BANK OF MINNEAPOLIS

Name	Business affiliation	Service began
C. W. Burges	Vice president and cashier, Security National Bank, Edgeley, N. Dak.	Jan. 1, 1949
(Vacancy)		
H. N. Thomson	Vice president, Farmers & Merchants Bank, Presho, S. Dak.	Jan. 1, 1951
Ray C. Lange	President, Chippewa Canning Co., Chippewa Falls, Wis.	Jan. 1, 1943
Homer P. Clark	Honorary chairman of the board, West Publishing Co., St. Paul, Minn.	Jan. 1, 1941
W. A. Denecke	Livestock rancher, Bozeman, Mont	Jan. 1, 1951
Paul E. Miller [1]	Director, agricultural extension division, University of Minnesota, Minneapolis, Minn.	Jan. 1, 1946
F. A. Flodin	President, Lake Shore Engineering Co., Iron Mountain, Mich.	Dec. 29, 1951
Roger B. Shepard [2]	Business executive, St. Paul, Minn	Dec. 28, 1939

FEDERAL RESERVE BANK OF KANSAS CITY

Name	Business affiliation	Service began
T. A. Dines	Chairman of the board, The United States National Bank of Denver, Colo.	Feb. 14, 1939
W. S. Kennedy	President and chairman of the board, The First National Bank, Junction City, Kans.	Oct. 2, 1951
W. L. Bunten	Executive vice president, Goodland State Bank, Goodland, Kans	Jan. 1, 1942
(Vacancy)		
E. M. Dodds	President, United States Cold Storage Corp., Kansas City, Mo.	Jan. 1, 1950
L. C. Hutson	Director, Chickasha Cotton Oil Co., Chickasha, Okla	June 28, 1944
Lyle L. Hague	Farmer and stockman, Cherokee, Okla	May 8, 1943
Robert B. Caldwell [2]	Caldwell, Downing, Noble & Garrity, Kansas City, Mo.	Feb. 11, 1938
(Vacancy)		

FEDERAL RESERVE BANK OF DALLAS

Name	Business affiliation	Service began
P. P. Butler	President, First National Bank in Houston, Tex	Jan. 1, 1949
J. Edd McLaughlin	Vice president, Security State Bank & Trust Co., Ralls, Tex.	Jan. 1, 1947
W. L. Peterson	President, The State National Bank, Denison, Tex	Jan. 1, 1948
George H. Zimmerman	Chairman of the board and president, Wm. Cameron & Co., Waco, Tex.	Apr. 24, 1951
George L. MacGregor	Chairman of the board, president and general manager, Dallas Power & Light Co., Dallas, Tex.	Jan. 1, 1947
W. F. Beall	President and general manager, 3 Beall Brothers 3, department stores, Jacksonville, Tex.	Apr. 23, 1946
R. B. Anderson [1]	General manager, W. T. Waggoner Estate, Vernon, Tex.	Jan. 1, 1946
J. R. Parten [2]	President, Woodley Petroleum Co., Houston, Tex	Jan. 1, 1944
G. A. Frierson	G. A. Frierson & Son, Merchants and Planters, Shreveport, La.	Mar. 27, 1945

FEDERAL RESERVE BANK OF SAN FRANCISCO

Name	Business affiliation	Service began
Carroll F. Byrd	President, The First National Bank of Willows, Calif	Jan. 1, 1940
William W. Crocker	Chairman of the board, Crocker First National Bank of San Francisco, Calif.	Jan. 1, 1947
Chas. H. Stewart	Chairman of the board, Portland Trust & Savings Bank, Portland, Oreg.	Feb. 15, 1946
Reese H. Taylor	President, Union Oil Co. of California, Los Angeles, Calif.	Sept. 17, 1937
Walter S. Johnson	President, American Forest Products Corp., San Francisco, Calif.	Feb. 15, 1946
Alden G. Roach	President, Columbia Steel Co., San Francisco, Calif	Jan. 1, 1951
Harry R. Wellman [1]	Director, Giannini Foundation of Agricultural Economics, University of California, Berkeley, Calif.	Oct. 27, 1942
Brayton Wilbur [2]	President, Wilbur-Ellis Co., San Francisco, Calif	July 5, 1944
Wm. R. Wallace, Jr.	Member of the firm of Wallace, Garrison, Norton & Ray, attorneys at law, San Francisco, Calif.	Sept. 30, 1947

[1] Deputy chairman.
[2] Chairman and Federal Reserve agent.

Directors of the branches of the Federal Reserve banks and their principal business affiliation

BUFFALO BRANCH OF THE FEDERAL RESERVE BANK OF NEW YORK

Name	Business affiliation	Service began
George G. Kleindinst	President, Liberty Bank of Buffalo, Buffalo, N. Y.	Jan. 1, 1949
George F. Bates	Vice president, Marine Trust Co. of Western New York, Power City Trust Office, Niagara Falls, N. Y.	Jan. 1, 1950
Bernard E. Finucane	President, Security Trust Co. of Rochester, N. Y.	Jan. 1, 1950
C. Elmer Olson	President, The First National Bank of Falconer, N. Y.	Jan. 1, 1951
Carl G. Wooster [1]	President, Wooster Fruit Farms, Inc., Union Hill, N. Y.	Jan. 1, 1946
Edgar F. Wendt	President, Buffalo Forge Co., Buffalo, N. Y.	Jan. 1, 1950
Robert C. Tait	President, Stromberg-Carlson Co., Rochester, N. Y.	Jan. 1, 1951

CINCINNATI BRANCH OF THE FEDERAL RESERVE BANK OF CLEVELAND

Name	Business affiliation	Service began
Spears Turley	Vice president and trust officer, State Bank & Trust Co. of Richmond, Ky.	Jan. 1, 1946
Joseph B. Hall	President, Kroger Co., Cincinnati, Ohio	Jan. 1, 1949
Sterling B. Cramer	First vice president, The Fifth Third Union Trust Co., Cincinnati, Ohio.	Jan. 1, 1950
L. M. Campbell	President, Second National Bank, Ashland, Ky.	Jan. 1, 1951
Ernest H. Hahne [1]	President, Miami University, Oxford, Ohio	Jan. 1, 1949
H. C. Besuden	Farmer, Winchester, Ky.	Jan. 1, 1950
Granville R. Lohnes	Treasurer, National Cash Register Co., Dayton, Ohio	Jan. 1, 1951

PITTSBURGH BRANCH OF THE FEDERAL RESERVE BANK OF CLEVELAND

Name	Business affiliation	Service began
Laurence S. Bell	Executive vice president, The Union National Bank of Pittsburgh, Pa.	Jan. 1, 1946
Montfort Jones	Professor of finance, The University of Pittsburgh, Pa.	Jan. 1, 1949
John Barclay, Jr.	President Barclay-Westmoreland Trust Co., Greensburg, Pa.	Jan. 1, 1950
Hugo E. Laupp	President, Wheeling Dollar Savings & Trust Co., Wheeling, W. Va.	Jan. 1, 1951
A. H. Burchfield [1]	President and general manager, Joseph Horne Co., Pittsburgh, Pa.	Jan. 1, 1946
Sidney A. Swensrud	President, Gulf Oil Corp., Pittsburgh, Pa.	Feb. 3, 1949
Henry A. Roemer, Jr.	President, Sharon Steel Corp., Sharon, Pa.	Jan. 1, 1951

BALTIMORE BRANCH OF THE FEDERAL RESERVE BANK OF RICHMOND

Name	Business affiliation	Service began
Charles A. Piper	President, The Liberty Trust Co., Cumberland, Md.	Apr. 28, 1950
Eugene G. Grady	President, The Western National Bank, Baltimore, Md.	Jan. 1, 1947
Lacy I. Rice	President, The Old National Bank, Martinsburg, W. Va.	Jan. 1, 1950
Charles W. Hoff	President, Union Trust Co. of Maryland, Baltimore, Md.	Jan. 1, 1951
James E. Hooper	Vice president, William E. Hooper & Sons Co., Baltimore, Md.	Jan. 1, 1946
L. Vinton Hershey [1]	President and general manager, Hagerstown Shoe Co., Hagerstown, Md.	Jan. 1, 1947
James M. Shriver	President, The B. F. Shriver Co., Westminster, Md.	Nov. 30, 1945

CHARLOTTE BRANCH OF THE FEDERAL RESERVE BANK OF RICHMOND

Name	Business affiliation	Service began
Thomas J. Robertson	President, First National Bank of South Carolina, Columbia, S. C.	Jan. 1, 1949
George S. Crouch	President, Union National Bank, Charlotte, N. C.	Apr. 10, 1947
Jonathan Woody	President, First National Bank, Waynesville, N. C.	Jan. 1, 1950
A. K. Davis	Senior vice president, Wachovia Bank & Trust Co., Winston-Salem, N. C.	Jan. 1, 1951
R. Flake Shaw [1]	Executive vice president, North Carolina Farm Bureau Federation, Greensboro, N. C.	Jan. 1, 1946
W. A. L. Sibley	Vice president and treasurer, Monarch Mills, Union, S. C.	Jan. 1, 1947
R. E. Ebert	President, Dixie Home Stores, Inc., Greenville, S. C.	Jan. 1, 1948

[1] Chairman.

Directors of the branches of the Federal Reserve banks and their principal business affiliation—Continued

BIRMINGHAM BRANCH OF THE FEDERAL RESERVE BANK OF ATLANTA

Name	Business affiliation	Service began
D. O. Wadsworth	President, The American National Bank of Gadsden, Ala.	Jan. 1, 1949
J. B. Barnett	President, The First National Bank of Monroeville, Ala.	Jan. 1, 1950
A. M. Shook	President, Security Commercial Bank, Birmingham, Ala.	Jan. 1, 1950
T. J. Cottingham	President, State National Bank of Decatur, Ala.	Jan. 1, 1951
Wm. Howard Smith	President, McQueen-Smith Farms, Prattville, Ala.	Mar. 14, 1944
Thad Holt [1]	President and treasurer, Voice of Alabama, Inc., Birmingham, Ala.	Apr. 1, 1947
John M. Gallalee	President, University of Alabama, Tuscaloosa, Ala.	Mar. 22, 1950

JACKSONVILLE BRANCH OF THE FEDERAL RESERVE BANK OF ATLANTA

Name	Business affiliation	Service began
J. D. Camp	President, Broward National Bank of Fort Lauderdale, Fla.	Jan. 1, 1949
N. Ray Carrol	President, The First National Bank of Kissimmee, Fla.	Jan. 1, 1950
J. E. Bryan	President, Union Trust Co., St. Petersburg, Fla.	Jan. 1, 1950
Clement B. Chinn	President, The First National Bank of Miami, Fla.	Jan. 1, 1951
J. Hillis Miller [1]	President, University of Florida, Gainesville, Fla.	Aug. 16, 1948
Howard Phillips	Vice president and general manager, Dr. P. Phillips Co., Orlando, Fla.	Feb. 5, 1948
Marshall F. Howell	Vice president, Bond-Howell Lumber Co., Jacksonville, Fla.	Jan. 1, 1948

NASHVILLE BRANCH OF THE FEDERAL RESERVE BANK OF ATLANTA

Name	Business affiliation	Service began
Parkes Armistead	President, First American National Bank of Nashville, Tenn.	Jan. 1, 1949
T. L. Cathey	President, Peoples and Union Bank, Lewisburg, Tenn.	Dec. 10, 1948
Thos. D. Brabson	President, The First National Bank of Greeneville, Tenn.	Jan. 1, 1950
G. C. Graves	President, The First National Bank of Athens, Tenn.	Jan. 1, 1951
H. C. Meacham [1]	Agriculture and livestock, Franklin, Tenn.	Feb. 14, 1946
W. Bratten Evans	President, Tennessee Enamel Manufacturing Co., Nashville, Tenn.	June 20, 1944
C. E. Brehm	President, University of Tennessee, Knoxville, Tenn.	Jan. 1, 1948

NEW ORLEANS BRANCH OF THE FEDERAL RESERVE BANK OF ATLANTA

Name	Business affiliation	Service began
James C. Bolton	President, Rapides Bank & Trust Co. in Alexandria, La.	Jan. 1, 1949
Elbert E. Moore	President, Louisiana National Bank of Baton Rouge, La.	Jan. 1, 1950
Percy H. Sitges	President, Louisiana Savings Bank & Trust Co., New Orleans, La.	Jan. 1, 1950
William C. Carter	President, Gulf National Bank of Gulfport, Miss.	Jan. 1, 1951
John J. Shaffer, Jr.	Agriculture and farm machinery, Ellendale, La.	Apr. 12, 1943
E. O. Batson [1]	President, Batson-McGehee Co., Inc., Millard, Miss.	June 24, 1947
H. G. Chalkley, Jr.	President, Sweet Lake Land & Oil Co., Inc., Lake Charles, La.	Jan. 3, 1946

DETROIT BRANCH OF THE FEDERAL RESERVE BANK OF CHICAGO

Name	Business affiliation	Service began
Charles T. Fisher, Jr.	President, The National Bank of Detroit, Mich.	Jan. 1, 1946
John A. Stewart	Vice president and cashier, Second National Bank & Trust Co., Saginaw, Mich.	Jan. 1, 1949
Howard P. Parshall	President, Commonwealth Bank, Detroit, Mich.	Jan. 1, 1951
William M. Day	Vice president and general manager, Michigan Bell Telephone Co., Detroit, Mich.	Jan. 1, 1951
John A. Hannah [1]	President, Michigan State College, East Lansing, Mich.	Jan. 1, 1951

LITTLE ROCK BRANCH OF THE FEDERAL RESERVE BANK OF ST. LOUIS

Name	Business affiliation	Service began
Lloyd Spencer	President, First National Bank, Hope, Ark.	Jan. 10, 1946
Thos. W. Stone	Executive vice president, The Arkansas National Bank, Hot Springs, Ark.	Jan. 1, 1949
Harvey C. Couch, Jr.	President, Union National Bank, Little Rock, Ark.	Jan. 1, 1950
Gaither C. Johnston	President, First National Bank, Newport, Ark.	Jan. 1, 1951
Cecil C. Cox	Farmer, Stuttgart, Ark.	Jan. 1, 1946
Stonewall J. Beauchamp [1]	President, Terminal Warehouse Co., Little Rock, Ark.	Jan. 1, 1950
Sam B. Strauss	President, Pfeifers of Arkansas, Little Rock, Ark.	Jan. 1, 1951

[1] Chairman.

Directors of the branches of the Federal Reserve banks and their principal business affiliation—Continued

LOUISVILLE BRANCH OF THE FEDERAL RESERVE BANK OF ST. LOUIS

Name	Business affiliation	Service began
H. Lee Cooper	President, Ohio Valley National Bank, Henderson, Ky	Jan. 10, 1946
Ira F. Wilcox	Vice president and cashier, The Union National Bank, New Albany, Ind.	Jan. 1, 1949
A. C. Voris	President, Citizens National Bank, Bedford, Ind	Jan. 10, 1946
Noel Rush	President, Lincoln Bank & Trust, Co., Louisville, Ky	Oct. 1, 1949
Pierre B. McBride	President, Porcelain Metals Corp., Louisville, Ky	Jan. 1, 1951
Smith D. Broadbent, Jr	Farmer, Cadiz, Ky	June 15, 1948
Alvin A. Voit [1]	President, Mengel Co., Louisville, Ky	Jan. 20, 1948

MEMPHIS BRANCH OF THE FEDERAL RESERVE BANK OF ST. LOUIS

Norfleet Turner	President, First National Bank, Memphis, Tenn	Jan. 1, 1946
H. W. Hicks	President, First National Bank, Jackson, Tenn	Jan. 10, 1946
Ben L. Ross	Chairman of board, Phillips National Bank, Helena, Ark.	Jan. 1, 1950
C. Haley Reeves	President, Mechants and Farmers Bank, Columbus, Miss.	Jan. 1, 1951
Leslie M. Stratton, Jr.[1]	President, Stratton-Warren Hardware Co., Memphis, Tenn.	Jan. 1, 1946
Hugh M. Brinkley	Farmer, Hughes, Ark	Jan. 1, 1947
M. P. Moore	Owner, Circle M Ranch, Senatobia, Miss	Jan. 1, 1948

HELENA BRANCH OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS

B. M. Harris	President, Yellowstone Bank, Columbus, Mont	Jan. 10, 1946
Theodore Jacobs	President, First National Bank, Missoula, Mont	Jan. 1, 1947
E. D. MacHaffie	Investments, Helena, Mont	Jan. 1, 1947
G. R. Milburn	Livestock rancher, Grass Range, Mont	Jan. 12, 1951
John E. Corette, Jr.[1]	Vice president, Montana Power Co., Butte, Mont	Aug. 11, 1950

DENVER BRANCH OF THE FEDERAL RESERVE BANK OF KANSAS CITY

P. K. Alexander	Vice president, The First National Bank of Denver, Colo.	Sept. 14, 1944
Ramon B. Handy	Executive vice president, The First National Bank of Greeley, Colo.	Jan. 18, 1951
Albert K. Mitchell	Rancher, Albert, N. Mex	Jan. 9, 1947
Cecil Puckett [1]	Dean, College of Business Administration, University of Denver, Colo.	June 6, 1950
G. Norman Winder	Rancher, Craig, Colo	Jan. 1, 1949

OKLAHOMA CITY BRANCH OF THE FEDERAL RESERVE BANK OF KANSAS CITY

S. A. Bryant	President, The Farmers National Bank of Cushing, Okla.	Jan. 1, 1946
F. M. Overstreet	President, First National Bank at Ponca City, Okla	Nov. 18, 1950
Frank A. Sewell	Chairman of the board and president, The Liberty National Bank & Trust Co. of Oklahoma City, Okla.	Jan. 20, 1949
Cecil W. Cotton [1]	President, C. W. Cotton Supply Co., Tulsa, Okla	Jan. 1, 1948
Rufus J. Green	Rancher and farmer, Duncan, Okla	Jan. 1, 1947

OMAHA BRANCH OF THE FEDERAL RESERVE BANK OF KANSAS CITY

I. R. Alter	President, The First National Bank of Grand Island, Nebr.	Jan. 1, 1948
Ellsworth Moser	President, The United States National Bank of Omaha, Nebr.	Jan. 12, 1950
Fred W. Marble	President, The Stock Growers National Bank of Cheyenne, Wyo.	Jan. 1, 1947
Joseph W. Seacrest [1]	Co-publisher, Lincoln State Journal, Lincoln, Nebr	Apr. 16, 1948
Fred S. Wallace	Farmer, Gibbon, Nebr	Nov. 1, 1946

EL PASO BRANCH OF THE FEDERAL RESERVE BANK OF DALLAS

W. S. Warnock	Vice President, El Paso National Bank, El Paso, Tex	Jan. 1, 1946
W. Henry Wooldridge	President, Lone Star Motor Co., El Paso, Tex	Jan. 1, 1946
George G. Matkin	President, State National Bank, El Paso, Tex	Jan. 1, 1947
W. H. Holcombe	Executive vice president, Security State Bank, Pecos, Tex.	Jan. 1, 1948
Dorrance D. Roderick [1]	President, Newspaper Printing Corp., El Paso, Tex	Jan. 1, 1946
Hiram S. Corbett	President, J. Knox Corbett Lumber Co., Tucson, Ariz	Jan. 1, 1947
Hal Bogle	Livestock feeding, farming, and ranching, Dexter, N. Mex.	Mar. 13, 1945

[1] **Chairman.**

Directors of the branches of the Federal Reserve banks and their principal business affiliation—Continued

HOUSTON BRANCH OF THE FEDERAL RESERVE BANK OF DALLAS

Name	Business affiliation	Service began
O. R. Weyrich	President, Houston Bank & Trust Co., Houston, Tex	Jan. 1, 1949
P. R. Hamill	President, Bay City Bank & Trust Co., Bay City, Tex	Jan. 1, 1949
Melvin Rouff	President, Houston National Bank, Houston, Tex	Jan. 1, 1947
R. Lee Kempner	President, United States National Bank, Galveston, Tex	Jan. 1, 1948
Ross Stewart [1]	President, C. Jim Stewart & Stevenson, Inc., Houston, Tex.	Jan. 29, 1946
Charles N. Shepardson	Dean of agriculture, A. & M. College of Texas, College Station, Tex.	Jan. 1, 1950
Herbert G. Sutton	T. O. Sutton & Sons, Colmesneil, Tex	Jan. 1, 1950

SAN ANTONIO BRANCH OF THE FEDERAL RESERVE BANK OF DALLAS

Name	Business affiliation	Service began
C. L. Skaggs	President, The First National Bank of Weslaco, Tex	Jan. 1, 1946
E. A. Baetz	President, Bexar County National Bank, San Antonio, Tex.	Jan. 1, 1949
Riley Peters	President, First State Bank, Kerrville, Tex	Jan. 1, 1947
E. R. L. Wroe	President, American National Bank, Austin, Tex	Jan. 1, 1948
Henry P. Drought [1]	Attorney at law, San Antonio, Tex	Nov. 6, 1946
D. Hayden Perry	Livestock farming, Robstown, Tex	Jan. 1, 1950
Edward E. Hale	Chairman of the department and professor of economics, The University of Texas, Austin, Tex.	Jan. 1, 1948

LOS ANGELES BRANCH OF THE FEDERAL RESERVE BANK OF SAN FRANCISCO

Name	Business affiliation	Service began
W. R. Bimson	President, the Valley National Bank of Phoenix, Ariz	Jan. 1, 1948
M. Vilas Hubbard	President, Citizens Commercial Trust and Savings Bank of Pasadena, Calif.	Jan. 1, 1947
Frank L. King	President, California Bank, Los Angeles, Calif	Jan. 1, 1947
Paul H. Helms [1]	President, Helms Bakeries, Los Angeles, Calif	Jan. 1, 1950
Fred G. Sherrill	Vice President, J. G. Boswell Co., Los Angeles, Calif	Apr. 4, 1946

PORTLAND BRANCH OF THE FEDERAL RESERVE BANK OF SAN FRANCISCO

Name	Business affiliation	Service began
E. B. MacNaughton	Chairman of the board, The First National Bank of Portland, Oreg.	Mar. 7, 1946
W. W. Flint	President, The First National Bank of Cottonwood, Idaho.	Jan. 1, 1947
Frank Wortman	President, The First National Bank of McMinnville, Oreg.	Jan. 1, 1949
Aaron M. Frank [1]	President, Meier & Frank Co., Inc., Portland, Oreg	Apr. 5, 1946
R. B. Taylor	Livestock and farming, Adams, Oreg	Jan. 1, 1947

SALT LAKE CITY BRANCH OF THE FEDERAL RESERVE BANK OF SAN FRANCISCO

Name	Business affiliation	Service began
D. F. Richards	President, American National Bank of Idaho, Idaho Falls, Idaho.	Jan. 1, 1946
Chas. L. Smith	Chairman of the board, First Security Bank of Utah, National Association, Salt Lake City, Utah.	Jan. 1, 1947
John A. Schoonover	President, The Idaho First National Bank, Boise, Idaho	Jan. 1, 1947
Frank M. Browning [1]	President, Ogden Buick Sales Co., Ogden, Utah	Feb. 16, 1950
Merle G. Hyer	Livestock and farming, Lewiston, Utah	Jan. 1, 1947

SEATTLE BRANCH OF THE FEDERAL RESERVE BANK OF SAN FRANCISCO

Name	Business affiliation	Service began
Lawrence M. Arnold	Chairman of the board, Seattle-First National Bank, Seattle, Wash.	Jan. 1, 1946
Fred C. Forrest	Chairman of the board and president, The First National Bank of Pullman, Wash.	Jan. 1, 1947
Benj. N. Phillips	Chairman of the board, First National Bank in Port Angeles, Wash.	Jan. 1, 1947
Howard H. Preston [1]	Professor of money and banking, College of Business Administration, University of Washington, Seattle, Wash.	Jan. 1, 1950
Ralph Sundquist	Fruit grower and cold storage operator, Yakima, Wash	Jan. 1, 1951

[1] Chairman.

10. Are the Federal Reserve Banks parts of the Executive Branch of the United States Government? Are they parts of the private economy? What are the implications, advantages, and disadvantages of the private ownership of the stock of the Federal Reserve Banks?

The Federal Reserve Banks are corporate instrumentalities of the Federal Government created by Congress for the performance of governmental functions. They have been variously described by the courts as "important agencies of the Federal Government in its control of banking and currency",[30] and as governmental agencies under the direction of the Federal Reserve Board.[31]

In the report of the House Banking and Currency Committee on the original Federal Reserve Act, Chairman Carter Glass stated that the Federal Reserve Banks would have "an essentially public character".[32] Their public nature is indicated by the governmental character of the functions assigned to them by the law and by the fact that in the exercise of these functions they are subject to general supervision and control by the Board of Governors of the Federal Reserve System.

Among their many important public functions, the Federal Reserve Banks engage in open market operations under the direction of the Federal Open-Market Committee; establish discount rates, subject to review and determination of the Board of Governors; extend credit accommodations to member banks; act as the medium for the issuance of Federal Reserve notes which constitute the bulk of the currency now in use by the public and also as the source of supply for other forms of currency and coin; hold the reserve balances of their member banks; exercise supervisory and examination functions with respect to State member banks; provide an expeditious mechanism for the collection of checks; and act as fiscal agents of the United States and play a vital role in the practical handling of the public debt and in carrying out other Government financial operations.

The fact that a corporation is created and utilized by Congress as a public instrumentality for the performance of governmental functions, however, does not necessarily make it a "department" of the Government.[33] Thus, the old Banks of the United States, although public corporations created to perform governmental functions, were not regarded as a part of the Federal Government. In a case involving the Second Bank in 1824, Chief Justice Marshall observed that, though the Government held shares in that Bank, "the privileges of the Government were not imparted by that circumstance to the bank.[34] There are other more recent examples of corporate instrumentalities of the Government created for public purposes, such as the Federal Land Banks, which have been distinguished from the Government itself.[35]

As a consequence of the public nature of the Federal Reserve Banks, ownership of their stock does not carry with it the same attributes of control and financial interest usually attached to stock ownership in private corporations. The amount of Reserve Bank stock which a

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[30] *Federal Reserve Bank of Richmond* v. *Kalin*, 77 Fed. 2 (d) 50, 51 (C. C. A. 4th, 1935).
[31] *Raichle* v. *Federal Reserve Bank of New York*, 34 Fed. 2 (d) 910, 916 (C. C. A. 2d, 1929).
[32] H. Rept. No. 69, 63d Cong., 1st Sess., p. 16.
[33] *United States* v. *Salant & Salant*, 41 Fed. Supp., 196, 197 (D. C. N. Y., 1938).
[34] *Bank of the United States* v. *Planters' Bank*, 9 Wheat. (U. S.) 904, 908 (1824).
[35] *Federal Land Bank* v. *Priddy*, 295 U. S. 229, 233 (1935).

member bank must own is fixed by law in relation to the member bank's own capital and surplus. Such stock may not be transferred or hypothecated. Ownership of stock entitles the member banks to no voice in the management of the affairs of the Reserve Bank other than the right to participate in the election of six of the nine directors of the Reserve Bank. As the result of the election procedure prescribed by the Federal Reserve Act, each member bank votes for only two of the nine directors. Under the law, dividends on Federal Reserve Bank stock are limited to 6 percent per annum; and in the event of the liquidation of a Federal Reserve Bank, any remaining surplus would be paid to the United States.

Ownership of Federal Reserve Bank stock by member banks is an obligation incident to membership in the System—in effect, a compulsory contribution to the capital of the Reserve Banks. It was not intended to, nor does it, vest in member banks the control of the Reserve Banks or the determination of System policies. Such control would obviously be inappropriate in view of the functions exercised by the Reserve Banks.

Stock ownership by the member banks has certain definite advantages. It provides a wide decentralized base for the organization of a Federal Reserve Bank. The element of member bank interest, though without control, has contributed to a breadth of judgment and experience on the part of the Reserve Bank directors in evaluating questions of public policy and has helped to foster efficiency and business-like methods in the operations of the Reserve Banks as public institutions. It gives to each member bank a tangible interest in, and direct connection with, the Federal Reserve Bank of its district, and this has real psychological value. It helps to create in member banks a greater interest in the affairs of the System and understanding of its purposes and operations than would be the case in the absence of such ownership.

In view of the positive advantages in System operation of the present plan of stock ownership and in the absence of serious disadvantages, it is believed that a change in this arrangement would not result in any substantial improvement in System organization or functions. The direct relationship between the Reserve Banks and the member banks makes possible a maximum of cooperation between commercial banks, business enterprises, and the Government in the attainment of the public objectives for which the System was created.

11. Does the Board of Governors follow the practice of submitting its reports to Congress on pending legislation to the Bureau of the Budget to determine whether or not they are in accordance with the program of the President? If it submits some but not all of such reports, what are the criteria by which those submitted are selected? Does the Bureau of the Budget submit proposed reports of the Executive agencies to the Board of Governors for comment?

Procedures for clearance of reports on proposed and pending legislation have been set forth in a Budget Bureau circular, as revised, issued pursuant to an executive order of the President. The current revision of the circular was issued under date of October 25, 1948.[36] It has been the practice of the Board of Governors since 1948 to submit to the Bureau of the Budget in advance of submission to Congress all reports or recommendations on pending legislation except (1) cases in which submission to the Bureau has not been possible within the time allowed by the congressional committee for submission of the report and (2) recommendations contained in the Board's annual reports.

Whenever time does not permit the sending of a report to the Bureau of the Budget before it is sent to the committees of the Congress, a copy of the report is given to the Bureau when it is transmitted to the Congress. This arrangement is in accord with the procedure prescribed in the Budget Bureau circular.

Recommendations contained in the Board's annual reports for 1948 and 1949 (the 1950 report contained no legislative recommendations) were discussed in letters sent to the Bureau of the Budget in 1948, 1949, and 1950 in response to requests received from the President in each of those years for a report on the legislative program of the Federal Reserve System for the succeeding year. In each case the letter was sent prior to the submission of the annual report for the year to the Congress.

During the 1951 session of the Congress, pursuant to the practice described above, two recommendations with respect to legislation proposed by the Board were submitted to the Bureau of the Budget. Seven reports on legislation in response to requests received from committees of Congress were also sent to the Bureau.

The Bureau of the Budget submits to the Board for comment proposed reports of other agencies on matters of interest to the Board. During the 1951 session of the Congress the Board submitted reports to the Bureau in response to 22 requests for the views of the Board on proposed legislation.

12. If policies adopted by (*a*) the Board of Governors, (*b*) the Federal Open Market Committee, or (*c*) the Federal Reserve Banks differ from the policies of agencies operating under the direction of the President, what means, if any, are adopted to coordinate the policies? How urgent is the problem of coordination? Give examples.

The Board of Governors of the Federal Reserve System endeavors to keep informed about the policies and operations of other Government officials and agencies that may in any way affect or be affected by the operations of the Federal Reserve System, to take them into consideration in formulating its policies, and to notify or confer with the agencies regarding related policies. The Federal Open Market Committee and the Federal Reserve Banks, generally through the Board of Governors, follow similar practices.

The Chairman, other members of the Board or the Open Market Committee, or members of the Federal Reserve staff have frequent conferences with other Government officials about matters of common interest. These include particularly officials of the Treasury, the

[36] Bureau of the Budget Circular A–19, Revised. The purpose of the present procedure is set forth in the revised circular as follows:

"Coordination and clearance of agency reports on legislation are undertaken in order that the President may have the views of the agencies and that his position may be determined and expressed for their guidance and for the information of the Congress. When appropriate, the clearance process is used to develop, for presentation to the Congress, a coordinated report or legislative proposal which meets the requirements of all interested agencies."

Budget Bureau, the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Council of Economic Advisers, the Securities and Exchange Commission, the Housing and Home Finance Agency, the Farm Credit Administration, and the various departments and agencies concerned with international financial problems. Whenever appropriate, the Chairman of the Board also confers with the President, who is regularly kept informed of all important policy actions by the Federal Reserve System. Members of the Board's staff also serve on numerous inter-departmental committees which work together on problems of common interest to groups of agencies.

Illustrative of these relationships and procedures are the practices of the Board with regard to legislative proposals, discussed in the preceding Question (B-11) and also the decription given in the following Question (B-13) regarding the nature of the mutual concerns of the Federal Reserve and other Federal agencies and their methods of cooperation to achieve appropriate policies. Exchanges of information and joint consideration of common problems are essential for the effective execution of the Federal Reserve System's statutory responsibilities as well as for the smooth functioning of the Government as a whole, of which the Board of Governors is an integral part.

Occasionally, however, policies arrived at on the basis of the System's special responsibilities come into conflict with policies arrived at by other Government agencies in discharging their duties—conflicts which, by fundamental nature, cannot be resolved through normal interagency relationships and procedures. When this happens, each agency involved shares the responsibility for finding ways to resolve the conflict. Each must deal with the essential factors in the light of its judgment of the circumstances and a clear sense of its own statutory responsibilities. Most of these conflicts are resolved.

It may be observed that the delicate problem of coordination and adjustment among the agencies of Government is a basic and inescapable factor in public administration. Under present day conditions of growing complexity of governmental machinery, the statutory division of functional and operational responsibilities and the parceling out of power into many portions gives rise constantly to administrative points of difference. The stress of adaptation to ever-changing conditions occasionally transforms some of these points of difference into public issues which merit full and free discussion in the manner characteristic of democratic processes.

The subject of coordination is further discussed in the answer to Question B-13.

13. State the matters of common interest between the Federal Reserve and (*a*) the Council of Economic Advisers, (*b*) the Treasury Department, (*c*) the Comptroller of the Currency, (*d*) the Federal Deposit Insurance Corporation, and (*e*) Federal lending agencies generally and describe the steps taken to secure a coordination of policy among them. What suggestions have you for the improvement of coordination between the Federal Reserve System and other agencies having an interest in money and credit?

Responsibilities, objectives, and interests of the Federal Reserve System have been fully indicated in answers to previous questions.

The relationship between Federal Reserve interests and those of other agencies of Government was discussed in the answer of the former Chairman of the Board to a related questionnaire of a Subcommittee of the Joint Committee on the Economic Report and was summarized as follows: [37]

Monetary management in the public interest is the cardinal concern of the Federal Reserve System. It has the responsibility of advising the Government as a whole with respect to monetary matters, particularly as to the contributions of monetary and credit policy to general economic policy. It has an obligation through educational work to foster public understanding of monetary policies and the relation of money and credit to economic conditions and development. It collects and analyzes economic information to facilitate the attainment of the System's objectives. Together with the Treasury and the Government generally, the Federal Reserve System shares responsibility for maintaining universal confidence in our money and in our financial and economic institutions.

The System also has (or shares with other agencies) certain supervisory functions, including supervision not only of many banks but also affiliates and holding company affiliates of banks. It also performs certain important service functions such as supplying currency, facilitating the clearance of checks, and performing fiscal agency services for the United States Government. These functions are essential to the operation of the economy and require large staffs at the Federal Reserve Banks. The System also makes or guarantees loans to businesses in certain limited circumstances, * * *

(*a*) *The Council of Economic Advisers.*—The Federal Reserve System and the Council of Economic Advisers in the course of their regular work deal with many matters of considerable common interest as well as with others involving little common interest. The System, in considering the objectives of monetary policy and the means of reaching these objectives in particular situations, reviews a wide range of economic facts and problems. Some of these relate to technical matters especially important for carrying out various credit operations. Many of them, however, relate to general financial conditions favorable to economic stability and high production and are studied also by the Council, which is charged with broad advisory responsibilities relating to economic policy generally, and by various other Government groups, including some in the legislative branch as well as a number in the executive branch. Knowledge of what is going on in the economy and what may happen in the future, taking into account various alternative policies, is basic to many Governmental activities.

The Federal Reserve System has long been active in developing new methods for measuring and interpreting economic developments as they affect, and are affected by, credit and monetary policies of all sorts. Similarly, the Council, in meeting its advisory responsibilities, needs to be informed as fully as possible as to the course of economic affairs and to explore new ways of developing improved analyses in this highly complex field.

Again, from time to time the System makes recommendations concerning legislation directly touching on problems of monetary management. Such legislation, as it may have a bearing on economic stability and growth, is of great interest to the Council.

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[37] From answer to Question I.1 in Reply of Chairman of the Board of Governors of the Federal Reserve System to Questionnaire of the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Congressional Committee on the Economic Report, November 1949.

When different agencies are concerned with matters which involve considerable common interest, it is essential that there be frequent interchange of information and views as to their mutual problems. From the very beginning of the Council's work, the Federal Reserve System, and especially the Board of Governors and its staff, has been in constant touch with the Council and its staff in regard to many matters in the field of economic analysis and monetary policy formation. Informal contacts are frequent and representatives of the two agencies often work together on committees. In this way both agencies gain a broader understanding than otherwise would be possible of the nature of the problems under consideration, the relevant facts available, and the meaning of these facts for the problems in hand. In the period since passage of the Defense Production Act a good deal of attention has been given to discussion of Regulation W relating to installment credit, and to Regulation X and related FHA and VA regulations affecting real estate credit, as well as to broader monetary problems and policies.

(*b*) *The Treasury Department.*—With respect to the interrelation of the interests of the Treasury and the Federal Reserve System, the answer of the former Chairman of the Board to a previous questionnaire included the following statements: [38]

Monetary and credit policies are closely interwoven with fiscal and debt-management policies. These interrelationships have become increasingly important and binding as a result of the tremendous wartime expansion of the public debt to a dominant position in the over-all financial structure. It is essential that there be a high degree of coordination of decisions and actions and close cooperation on the part of the authorities operating in these fields.

Fiscal policies are in the final analysis determined by Congress in authorizing appropriations and legislating taxes, although the President and the various executive agencies of the Government have a major influence upon these policies in their recommendations for legislation and in carrying out the measures voted by the Congress. The Treasury has a primary responsibility for recommendations as to tax policy, as well as for the collection of taxes, and it has important discretionary authority with reference to the management of the public debt, which includes decisions as to the timing and nature of borrowing and of debt retirement. The Treasury possesses certain monetary powers—among these are the holding of monetary gold and silver stocks, the issuance of currency against them, and the minting of coins. The Treasury also has important responsibility with reference to the international financial operations of the Government. These various Treasury operations have a direct bearing on and are affected by conditions in the money market, with which the Federal Reserve is concerned.

The functions of the Federal Reserve are primarily monetary. * * * most of the country's circulating currency is issued by the Federal Reserve Banks, and the System has primary responsibility for influencing the supply, availability, and cost of bank reserves, which provide the basis for the bulk of the country's supply of money and credit. Federal Reserve authorities, by exercising an influence on the cost and availability of reserves, can affect not only the level of interest rates but also the ability and willingness of banks to lend and invest. These policies necessarily impinge upon public-debt operations. The Treasury can affect the supply of bank reserves to a limited extent through the exercise of its powers with reference to gold or currency or through the handling of its cash balances. Moreover, the magnitude of public debt offerings (or retirements), the rates of interest paid by the Treasury, and the maturities and other features of the various issues are reflected in the demands for credit and can thereby influence the supply of money and the demands upon the Federal Reserve.

The rates of interest which the Treasury finds it necessary to offer on new issues of securities are to a substantial degree affected by the Federal Reserve's influence on the money market. Obviously if the Treasury and the Federal Reserve were preoccupied solely with the question of rates, they would sacrifice

[38] In introduction to Sec. II and in answer to Question II.1 of the questionnaire previously cited.

all other considerations to this end. Both of course must take account of the many broad aspects of their respective policies and the effects upon the entire economic structure. Because measures adopted by either agency must be taken into consideration by the other in determining its policies, it is most essential that the Federal Reserve and the Treasury cooperate in the effort to direct their respective policies toward common-broad objectives of national policy. * * *

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Coordination of Treasury and Federal Reserve policies is effected by frequent consultation between policy-making and operating officials of the two agencies. It is customary for Treasury and Federal Reserve officials to consult before decisions are made by the Treasury with respect to (1) the day-to-day variations in the Treasury's balance at the Federal Reserve Banks and calls on balances with other depositaries (these transactions temporarily affect the supply of bank reserves); (2) any changes in the usual amounts or terms of weekly offerings of Treasury bills; (3) periodic offerings of new issues of other marketable securities and refunding or retirement of maturing securities, with reference to amounts, rates, and terms; and (4) changes from time to time in the nature of offerings of nonmarketable securities. Purchases and sales of marketable securities by the Treasury for the account of Government agencies and trust funds are handled through the Federal Reserve Banks, acting as fiscal agents for the Treasury, and Federal Reserve officials are consulted as to monetary effects of such operations.

In connection with the consultations of the Secretary of the Treasury with Federal Reserve officials prior to the adoption of financing programs, the System's representatives have taken the opportunity to give the Secretary their best judgment about market conditions and about the preference of banks and other investors for particular kinds of securities. In this way representatives of the Federal Reserve System have made available the benefit of their close contacts with the market and have endeavored to be helpful in the solution of the technical market problems of financing the Government.

Beyond giving advice and assistance as to the details of financing, the Federal Reserve System has a vital interest from the point of view of its own responsibilites in the broader economic and financial consequences and implications of Treasury financing. The securities offered, particularly to banks, have an important bearing upon the maintenance of an effectively operating money market, of sound banking conditions, and of freedom to pursue flexible monetary and credit policies appropriate to changing conditions.

Because of the economic effects of fiscal and debt management operations and policies, Federal Reserve officials frequently offer suggestions to the Treasury regarding various aspects of these policies, either those of a current nature or longer-term programs. Likewise the Secretary of the Treasury is customarily asked by the Federal Reserve for his views with respect to action contemplated by the System to effectuate its monetary and credit policies.

Further discussion of specific relations between the Federal Reserve and the Treasury is given elsewhere in this set of answers.[39]

(*c*) *The Comptroller of the Currency and* (*d*) *the Federal Deposit Insurance Corporation.*—The common interest between the Federal Reserve System and the other Federal banking agencies—the Comptroller of the Currency and the Federal Deposit Insurance Corporation—is bank supervision, in other words, the maintenance of a banking system that is made up of strong individual units with sound assets and adequate capital and with proper management. The Comptroller of the Currency is the oldest Federal bank supervisory agency and is engaged primarily in this activity. The Federal Deposit Insurance Corporation was created to administer insurance of deposits and also has supervisory functions. The prime responsibility of the Federal Reserve System for influencing the supply, availability, and cost of money carries along with it broad responsibilities for bank supervision.

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[39] See particularly answers to Questions A–4, F–29, and F–33.

The common interest of these three agencies and the steps taken to coordinate their activities were discussed in an answer of the former Chairman of the Board to an earlier questionnaire in the following statements: [40]

* * * Federal supervision and regulation of banks are divided among three agencies set up by Congress for different purposes and at widely separated times in our banking history. The Comptroller of the Currency over 85 years ago was charged with the responsibility of chartering and examining national banks. As passed in 1913 and with later amendments, one of the purposes of the Federal Reserve Act stated in its preamble was 'to establish a more effective supervision of banking in the United States,' and the Act places upon the Federal Reserve Board and the Federal Reserve Banks, among other responsibilities, supervisory and examining functions with respect to all member banks. In the depression period of the early 1930's, the Federal Deposit Insurance Corporation was created to administer a bank deposit insurance fund, and was given certain limited powers over all insured banks, including national banks and State member banks, and special powers of supervision and regulation with respect to nonmember insured banks. As a result, each of the three agencies is primarily concerned with a certain class of banks; but each also has regulatory functions in specific areas which affect banks primarily under the jurisdiction of one or both of the other agencies. In addition, Congress has placed upon the Board of Governors important responsibilities in the field of credit and monetary policy with which bank supervisory and regulatory policies have a definite relationship.

In the circumstances, a layman examining an organization chart of the three agencies or a description of their functions would expect to find little evidence of coordination in their supervisory policies and would probably expect them to be working completely at cross purposes. There has been no specific directive from Congress requiring cooperation between them and, except that the Comptroller of the Currency is an ex-officio member of the Board of Directors of the FDIC, each of the agencies is quite independent of the others. Actually, however, the agencies have accepted the need for cooperation as a practical matter and each of them has made its own contribution to this end.

In the field of bank supervision, which has to do with individual banks and is implemented by bank examinations, the three supervisory agencies appear to have achieved reasonably uniform standards for the appraisal of bank assets by bank examiners. This has resulted chiefly from the adoption of a written agreement between the three agencies and the National Association of Supervisors of State Banks, first in 1938 and revised, in detail but not in principal, in 1949. In such matters as the chartering of banks, admissions to deposit insurance, or to membership in the Federal Reserve System, and grants of permission to establish branches, a great deal of coordination has been likewise attained.

Serious problems of coordination have arisen from the fact that the three agencies are authorized under the law to issue and interpret regulations applicable to the classes of banks under their respective jurisdictions which relate to the same general subject matter and also from the fact that as to certain matters one of the agencies may possess regulatory authority with respect to a class of banks primarily under the jurisdiction of another agency. Even here, however, a considerable degree of uniformity has been accomplished.

Both in connection with supervisory and examination policies and the issuance and interpretation of regulations, coordination has resulted from constant efforts to foster discussions and consultations between the agencies both at top level and at the staff level. The 1938 agreement with respect to bank examination policies is an excellent example of the cooperation that may be accomplished through such methods.

A common understanding of mutual problems at the staff level has been substantially aided by the fact that in several districts the Federal Reserve Banks have provided office accommodations for the chief national bank examiners of the Comptroller's office and also for the corresponding field representatives of the FDIC. In the case of the FDIC, however, differences in areas covered by the various districts from those in Federal Reserve Districts made cooperation more difficult in some regions.

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[40] Answer to Question VI.2 of the questionnaire previously cited.

There are, of course, certain particulars in which complete coordination and uniformity with respect to examination policies as well as regulatory functions have not yet been achieved. That all reasonable steps should be taken to increase cooperation in these areas is obviously desirable. However, in proposing additional means of achieving closer cooperation, each of the three agencies would naturally be influenced by the special functions and objectives which have been assigned to it by the Congress.

(*e*) *Federal credit agencies generally.*—Federal lending agencies comprise more than 20 individual agencies that make credit available of specified types or to specified groups of private borrowers either by lending directly or by insuring or guaranteeing loans made by private financing institutions. Altogether these agencies are responsible for a substantial volume of credit extensions. Their outstanding loans and loan guarantees or insurance, domestic and foreign, have increased at an average annual rate of 5½ billion dollars since 1946, and totaled about 38 billion in mid-1951.

The purposes, interests, and activities of individual Federal lending agencies reflect mandates and powers given by Congress. Taken together, these activities represent numerous diverse interests. This is illustrated by the attached summary (Congressional Mandates and Powers of Selected Federal Credit Agencies, Exhibit A, p. 272) of objectives of several major agencies excerpted from statements submitted by the agencies in late 1949 to the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Congressional Committee on the Economic Report. The Federal lending agencies, moreover, have some authority for initiative in acting more or less vigorously, or in various directions, under their Congressional authorizations. To this extent the range of their operations is more flexible than if they spent amounts specifically appropriated.

In carrying out their functions, the Federal lending agencies do not have responsibility for the general credit and monetary situation. Their common interest with the Federal Reserve rests in the fact that their activities may affect and be affected by the credit and monetary operations of the Federal Reserve System in carrying out its responsibilities for adjusting the supply, availability, and cost of money to the changing needs of the economy.

Operations of these lending and loan guarantee or insurance agencies are related to Federal Reserve credit and monetary policies in one of two ways, depending on the nature of their operations. Agencies that make loans obtain funds in the amounts needed, either from the Treasury or by borrowing in the open market. If the former, they affect the volume of funds which the Treasury needs. The interest rates at which these funds are obtained depend in part on debt management policy and Federal Reserve credit and monetary policy. Agencies that guarantee or insure loans made by private lenders rely only indirectly on Government credit, but the volume of loans made under their programs is directly affected by the availability of reserves to the banking system. Obligations guaranteed or insured by the Federal Government, moreover, are to a considerable degree competitive with Government securities, and their issuance in substantial quantities affects the market for Government securities. Banks and other lending institutions in acquiring the guaranteed obligations may either sell, or have less funds available for the purchase of, direct Government obligations. The Federal Reserve may then be obliged to face a need for supplying additional funds to the market.

The operations of Federal lending and guaranteeing agencies promote particular activities, which are regarded by the Congress as desirable or essential, and they are generally intended to do so in a way that puts available funds to more active use and stimulates economic activity. The policies of the Federal Reserve may at times make it easier or more difficult for these agencies, or the insured lenders, to raise funds. Conversely, the existence of the demands of these agencies in the money market may at times interfere with or make difficult the carrying out of appropriate Federal Reserve policies.

No arrangements exist at present for cooperation between Federal lending agencies as a group and the Federal Reserve System on matters that affect credit and money. Under existing arrangements cooperation is on an individual agency basis through the informal, voluntary efforts of the responsible officials. Such efforts have been actively encouraged by the Bureau of the Budget in its contacts with the agencies.

In the defense emergency since mid-1950 provision has been made for further cooperation between agencies in the selective regulation of real estate credit and in the Voluntary Credit Restraint Program.[41] Under authority of the Defense Production Act, the President by Executive Order authorized the Board of Governors of the Federal Reserve System to determine the regulatory terms on real estate credit in consultation with the Housing and Home Finance Agency and authorized the Housing and Home Finance Administrator to apply regulatory terms established in this manner to real estate credit under all Federal-aid programs. As a result a high degree of cooperation in restraining real estate credit has been achieved among the following agencies: Federal Housing Administration, Public Housing Administration, Federal Home Loan Bank System, Federal National Mortgage Association, Veterans' Administration, Farmers Home Administration, and the Board of Governors of the Federal Reserve System. This has been worked out through an interagency committee on which various agencies interested in housing are represented and which has participated in many of the deliberations relating to Regulation X and its amendments.

Under the Voluntary Credit Restraint Program established in March 1951, a National Voluntary Credit Restraint Committee composed of representatives of commercial banks, insurance companies, investment bankers, mutual savings banks, and savings and loan associations has developed lending principles for the guidance of private lenders that cooperate in limiting their extension of credit to defense and essential civilian purposes. Contacts have been made with the Washington offices of Federal credit agencies, and they have shown a high degree of understanding and cooperation in taking appropriate steps to assure cooperation by their regional agents with the lending principles of the Program.

A series of actions, beginning in mid-1950, was directed toward curtailing Government lending and loan guaranteeing operations to amounts needed in the defense situation. Since the spring of 1951 the Bureau of the Budget, the Council of Economic Advisers, and the

[41] More complete discussion of real estate credit regulation and the Voluntary Credit Restraint Program is given in the replies to Questions F-41 and F-42.

Office of Defense Mobilization have made periodic reviews, at the request of the President, of the policies of Federal lending agencies to make certain that they promote the objectives of the defense effort by restraining less essential lending.

Means of improving cooperation between the Federal Reserve and other Government agencies.—Scrutiny of the diverse kinds of interrelationship of interests between the Federal Reserve and the Council of Economic Advisers, the Treasury Department, other Federal bank supervisory agencies, and Federal lending agencies generally indicates the complexity of the interagency problem which faces the Federal Reserve in its responsibility for general credit and monetary policy that will contribute to stable economic conditions. By one device or another, over-all credit and monetary policies need to be formulated with appropriate evaluation of other spheres of activity which affect the volume, availability, and cost of money and the economic situation generally. At the same time, the policies and operations of other Government agencies should take account of changing national credit and monetary needs. This should be the goal of any means adopted for achieving more effective cooperation between the Federal Reserve and other Government agencies.

That considerable cooperation already exists has been brought out in the above discussion of the relationships between the Federal Reserve and the different Federal agencies or groups of agencies. Informal day-to-day working relations between agencies have been established at both the official and the technical level and provide for a continuous interchange of information and views on operations, programs, and policies as they develop. When a matter of common interest attains a significant operating importance, cooperative relations and efforts are intensified and involve active participation at the highest levels of responsibility.

Additional means of cooperation have been created during the present defense emergency, to a considerable extent at the initiation of the executive branch of the Government under broad authority granted by the Congress. Those which affect relations between the Federal Reserve and individual Federal lending agencies have already been discussed. Of broader scope, however, is the Defense Mobilization Board established in January 1951 by Executive Order to provide a means of coordinating the policies and activities of the principal departments and agencies participating in the defense program.[42] The Chairman of the Board of Governors of the Federal Reserve System is a member of the Board which consists of the top officials.[43] The opportunity for cooperation in national economic policy related to the defense effort, including credit and monetary policy, between the various Government agencies having a primary interest has been greatly enhanced by this organizational arrangement.

The various considerations involved in devising means for achieving greater cooperation on credit and monetary matters between the Fed-

[42] The predecessor organization in World War II was the Economic Stabilization Board, which was authorized to formulate and develop a national economic policy to control inflationary pressures and the Director of which was empowered to issue directives to the departments and agencies involved.

[43] State Department, Treasury Department, Department of Defense, Interior Department, Agriculture Department, Commerce Department, Labor Department, Reconstruction Finance Corporation, Board of Governors of the Federal Reserve System, National Securities Resources Board, Economic Stabilization Agency, and Defense Production Administration.

eral Reserve System and Federal agencies having an interest in money and credit were discussed by the former Chairman of the Board of Governors in his reply to a related questionnaire of a Subcommittee of the Joint Committee on the Economic Report.[44] The specific question related to the advantages and disadvantages of a National Monetary and Credit Council such as was proposed by the Hoover Commission. In that reply it was suggested, among other things, that an advisory council, designed to promote consistency in policies of Federal agencies extending loans, loan insurance, and loan guarantees, and consistency of such policies with the general stabilization program of the Government in accordance with the objectives of the Employment Act of 1946, might gradually be evolved into an effective advisory and coordinating mechanism in the domestic field without impairing the essential operating flexibility of the various agencies; that it should be given ample flexibility in developing its functions; and that considerable experience might be needed before such a council could be given its most effective form and function. For this reason it was suggested that an experimental testing period under a more flexible arrangement than statutory provision might well be the appropriate approach to the problem. The Defense Mobilization Board is currently providing a useful experiment in cooperation consistent with this suggestion.

EXHIBIT A

Congressional Mandates and Powers of Selected Federal Credit Agencies [45]

Federal Housing Administration.—In approving the original National Housing Act on June 27, 1934, the intent of the Congress was to combat the depression of the early thirties and to make a lasting contribution to the Nation's economic stability. The provisions of the act by which these objectives were to be achieved included the vehicles of loan insurance and the secondary market. * * *

In the subsequent amendments to the National Housing Act, the intent of the Congress was, chronologically, for the Federal Housing Administration (*a*) to promote further recovery, (*b*) to combat the recession beginning in the fall of 1937, (*c*) to meet emergency housing needs during the defense, war, and immediate postwar periods on a basis consistent with the price, priority, and allocation controls in operation during this period, and (*d*) in the recent postwar years when controls were terminated to increase the supply of housing for veterans and at the same time inhibit the inflationary developments in construction and land costs (Compendium, pp. 230–1).

Federal Home Loan Banks.—The Federal home-loan banks constitute a reserve credit system serving approximately 3,800 member institutions, the bulk of which are savings and loan associations. * * * (Compendium, p. 240).

Federal National Mortgage Association.—The major purposes and objectives of the Federal National Mortgage Association are generally to assist the housing program by encouraging the construction of housing accommodations and investments in mortgages on homes and rental housing projects insured by FHA, and homes guaranteed to by the Veterans' Administration. As a means of accomplishing this objective, the Association established and maintains a secondary market for the purchase of such mortgages at par and accrued interest. This secondary market is used only where private financing is unavailable (Compendium, p. 222).

Farm Credit Administration.—The major purposes of the Farm Credit Administration and of the banks, corporations, and associations supervised by it are to provide a dependable source of long-term and short-term credit at all

[44] Answer to Question VI.6 of questionnaire cited earlier.

[45] Excerpts from "A Compendium of Materials on Monetary, Credit and Fiscal Policies," A Collection of Statements Submitted to the Subcommittee on Monetary, Credit, and Fiscal Policies by Government Officials, Bankers, Economists, and Others, Joint Committee on the Economic Report, S. Doc. No. 132, 81st Cong., 2d Sess.

times to farmers and to farmers' cooperative associations on a sound credit basis through coordinated cooperative credit facilities and to obtain loan funds from the investing public without the necessity of the Government guaranteeing the securities issued. A fundamental principle of the Farm Credit Administration is the encouragement and development of agricultural cooperative institutions with farmer ownership the ultimate objective, especially insofar as the institutions it supervises are concerned. A further objective, insofar as those banks, corporations, and associations are concerned, is farmer operation and control to the extent consistent with a federally chartered Nation-wide credit system which is subject to regulation and supervision by the Government (Compendium, p. 247).

Reconstruction Finance Corporation.—In authorizing RFC to make loans to private borrowers directly or in participation with banks or other lending institutions, the Congress stated the purposes and objectives to be: To aid in financing agriculture, commerce, and industry; to encourage small business; to help in maintaining the economic stability of the country; and to assist in promoting maximum employment and production. The major purposes of RFC loans are to help finance new or established business enterprises engaged in the production, distribution, and sale of goods or the furnishing of services in which has developed a need for working capital, and for funds to finance new construction and expansion of existing plant facilities, the credit for which is not otherwise available on reasonable terms (Compendium, p. 218).

14. How does the Board of Governors of the Federal Reserve System participate in the determination of the international policy of the United States? How is coordination of policy in this field effected? How successful has this coordination been?

The concern of the Federal Reserve System with broad questions of international financial policy arises mainly from (1) the general interest of the United States in the achievement and maintenance of monetary and financial stability abroad, and (2) the fact that the System's responsibilities with respect to the supply, availability, and cost of money within the United States are directly related to movements of gold and foreign funds arising from the balance of international payments of this country.

In addition to these general interests in international financial problems, the Federal Reserve Act vests in the Federal Reserve Banks certain powers relating to dealings in and loans on gold, correspondent relations and accounts with foreign central banks, fiscal agency functions for the Treasury Department and other Government agencies and for the International Bank and Monetary Fund, and purchases and sales of commercial paper and Government securities abroad. The Act also charges the Board of Governors with specific responsibility for supervising all the activities of Federal Reserve Banks in the foreign field, and for regulating the establishment of foreign branches and investment in foreign banking corporations by member banks.

The coordination of the international financial policies of the United States is the responsibility of the National Advisory Council on International Monetary and Financial Problems, which was established by Congress under the Bretton Woods Agreements Act of 1945 in conformity with recommendations made by the Board of Governors and by other Federal agencies. The Act instructs this Council to coordinate the policies and operations of the representatives of the United States on the International Bank and Monetary Fund, the Export-Import Bank, and all other agencies of the United States Government which make or participate in making foreign loans or which engage in foreign financial, exchange, or monetary transactions. In addition the Council is directed to recommend to the President general policy directives for the guidance of the United States representatives on the Bank and the Fund, and to advise and consult with the President and with the United States representatives on the Bank and the Fund on major problems arising in the administration of these institutions. Whenever the approval, consent, or agreement of the United States is required before an act may be taken by the Bank or the Fund, the decision is to be made by the Council under the general direction of the President.

The Act provides that the Chairman of the Board of Governors of the Federal Reserve System shall be a member of this Council. He is frequently represented at meetings by an alternate, ordinarily another member of the Board. In connection with this membership on the Council, the Board's Division of International Finance provides representation on the Staff Committee of the Council. In view of the special interests of the Federal Reserve in monetary problems, the Chairman of the Board of Governors or his representatives at both the policy and technical levels have undertaken to emphasize where appropriate the relation of United States foreign financial policies and operations to monetary stability here and abroad.

The subjects on which the Council formulates policy recommendations involve such diverse matters as the amounts and terms of loans and other financial assistance to foreign countries; international clearing arrangements; exchange rates and exchange restrictions; and the United States attitude toward credit and fiscal policies of other countries.

The National Advisory Council has proved an effective instrument for formulating over-all policies to guide United States agencies and the United States representatives in international organizations and for coordinating the financial activities of United States Government agencies. It should be recognized that, while the Council exists by virtue of law, its effectiveness depends on the willingness of the individual agencies to consult with it and on its ability to perform its coordinating functions in a manner consistent with the diverse operations of such agencies. In the 6 years of its experience, the Council has built up an atmosphere of mutual confidence and a tradition of cooperation among its member agencies. The appearance of new agencies and interdepartmental committees, in connection with the changes that have been taking place in the broad setting of international financial relations, has naturally given rise to new problems of integration and adjustment. The flexibility of the Council has facilitated the meeting of new and unforeseen problems while maintaining the essential elements of continuity in policies and objectives of the United States Government.

Apart from participating in the work of the Council, the Federal Reserve System is from time to time asked by Congressional committees, other Government agencies, and foreign financial and monetary authorities to provide technical assistance. This work derives in part from the operating functions of the System in such matters as gold, foreign accounts, and correspondent relations with other central banks, but fundamenally it originates from the specialized knowledge of the System's staff developed through a long experience in monetary management, and a recognition of the fact that financial stability in this country is significantly affected by monetary and economic trends in other countries of the free world.

C. Distribution Within the Federal Reserve System of Authority on Credit Policies

15. Trace the historical development of the process by which the discount rates of the Federal Reserve Banks are set and evaluate the relative authority of the Board of Governors and of the directors of the Federal Reserve Banks in setting discount rates today.

Development of process by which discount rates are set.—When the Federal Reserve Act was enacted in 1913, discount rates were regarded as the principal instrument of credit policy. Since that time, discount rates have come to be supplemented by other instruments of credit policy, notably by open market operations and the authority to change reserve requirements of member banks but also by regulation of stock market credit and at special times by regulation of consumer and real estate credit. Today, it is recognized that the process of influencing bank credit expansion is complex and that the instruments or combination of instruments most appropriate to the task will vary at different times according to the changing factors and forces affecting the growth of bank and other credit. Moreover, since the establishment of the System, far-reaching changes in the character of the economy, deriving from two world wars and basic developments in communications, transportation, mass production, business organization, and public policy, have worked to alter the fundamental structure of the credit market. Over this period the credit market has shifted from a structure of interconnected local and regional markets into a relatively well-integrated national market, with borrower rates of interest for financing of a given amount and comparable risk in closer alignment as between various localities and regions. With these changes, local and regional differences which might be reflected in differences in discount rates have diminished in importance and the rates have come to reflect more and more conditions in the nation as a whole. These modifications in the role and interrelation of regional discount rates have substantially affected the procedures by which the rates are fixed.

The present statutory authority for the fixing of discount rates is substantially the same as it was when the Federal Reserve System was established. Section 14 (d) of the original Federal Reserve Act provided that:

> Every Federal Reserve Bank shall have power:
>
> * * * * * * *
>
> (d) To establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business; * * *.

It seems clear that the framers of the Act contemplated that the authority to establish discount rates would be vested primarily in the directors of the several regional Federal Reserve Banks, but that the final determination of the rates would be in the Federal Reserve

Board. Thus, in explaining this provision of the Act on the floor of the Senate, Senator Owen stated:

> * * * This power primarily is placed in the hands of the Federal reserve bank directors; but the final determination of the rate is put in the hands of the Federal reserve board, * * *.
>
> * * * * * * *
>
> The Federal reserve board has the right, finally, to fix the rate of interest, for instance. The local board first fixes the rate of interest, and then it is subject to review and order by the Federal reserve board. It would be an order within which the board of directors or officers of such bank would act. (Cong. Rec., Vol. 50, Nov. 24, 1913, p. 5996, Vol. 51, Dec. 13, 1913, p. 859)

Before the opening of the Federal Reserve Banks for business on November 16, 1914, the Board requested the chairmen of the boards of directors of the Federal Reserve Banks (who were also designated by the law as Federal Reserve Agents) to indicate their views as to what rate of discount it would be wise to establish at the beginning. On the basis of reports received from the Reserve Banks, the Board voted to fix the initial rates at from 5½ percent to 6½ percent. In advising the Reserve Banks of this action, the Board stated that it had "felt it incumbent to adopt a moderately conservative policy in view of the fact that the exact conditions to which the banks will be subjected in operation cannot be precisely foretold", but pointed out that the initial rates were to be regarded "as provisional and subject to revision" and that the Reserve Banks had the right, with the approval of the Board, to change the rates at any time.

In keeping with the importance initially attached to discount rates, somewhat elaborate procedures were established in the early years for the fixing of such rates. At the Federal Reserve Board, there was set up a "discount committee" which met each Wednesday to consider discount rates prior to a meeting of the full Board on Thursday. Effective January 1, 1915, a procedure was established under which the Reserve Banks were asked to submit their recommendations for changes in discount rates in time to be considered by the Board's discount committee each Wednesday afternoon. A form was prescribed by the Board for use by the Reserve Banks in submitting their weekly reports, at first by mail and later by code telegrams. However, in March 1920, after it had been found that the Board's discount committee was unnecessary, the practice of requiring weekly reports from the Reserve Banks was discontinued and they were asked to advise the Board only when changes in rates were being recommended.

At an early date, a practice developed under which the Board, usually after discussion of the matter with the Federal Advisory Council, suggested to the Federal Reserve Banks the desirability of changes in discount rates; and ordinarily the Reserve Banks would promptly establish the desired rate subject to the Board's approval. Only rarely were rates fixed by the Reserve Banks later disapproved by the Board because of considerations of national policy. For example, in late 1919, when one of the Federal Reserve Banks voted to increase discount rates, the Board withheld its approval because the Treasury Department felt that such an increase in the discount rate would adversely affect the Treasury's program for marketing Liberty Bonds and Victory Notes. However, when the financing program of the Treasury was completed, the increase in rates requested by the Federal Reserve Bank was approved by the Board.

It was in connection with this case that Carter Glass, then Secretary of the Treasury and ex-officio member of the Board, requested the opinion of the Attorney General of the United States as to the authority of the Federal Reserve Board to initiate discount rate changes if it so desired. In an opinion dated December 9, 1919, the Acting Attorney General of the United States ruled that the Board—

has the right under the powers conferred by the Federal Reserve Act, to determine what rates of discount should be charged, from time to time by a Federal Reserve Bank, and, under their powers of review and determination, to require such rates to be put into effect by such Bank. (32 Op. Atty. Gen. 81, 84)

During the period of and immediately following the First World War, there was considerable use by member banks of the discount facilities of Federal Reserve Banks and there were frequent changes in discount rates. In an effort to curb credit and monetary expansion during this period, the Board recommended and Congress enacted on April 13, 1920, an amendment to section 14(d) of the Federal Reserve Act to authorize the establishment of graduated discount rates based on the amount borrowed by a member bank. The graduated rates authorized by this amendment soon proved to be impracticable and by an Act of March 4, 1923, section 14(d) was again amended to restore it to its original form.

Although the Board had requested the Federal Reserve Banks in 1914 not to announce any changes in discount rates until approved by the Board, it appears that on several occasions some of the Reserve Banks had publicized rate changes before the dates on which the changes were to become effective. Consequently, the Board, on August 22, 1924, adopted regulations designed to insure the confidentiality of information relating to prospective changes in discount rates. In brief, these regulations provided that all telegraphic commuications regarding rate changes be in code; that no information with respect to rate changes be published until the Federal Reserve Bank in question was advised that the change had been approved by the Board; that announcements of rate changes be made simultaneously by the Federal Reserve Bank and the Federal Reserve Board immediately after the close of business on the day on which the rate was approved; and that the new rate be effective at the beginning of the first business day following the day on which the announcement of the change was made.

During the early twenties open market operations of the Federal Reserve Banks became increasingly important as an instrument of credit and monetary policy and it was recognized that use of that instrument should be coordinated with the use of the power to fix discount rates. As evidence of this fact, the Federal Reserve Board, in November 1925, requested the Federal Reserve Banks to report not only changes in the regular discount rates, but also buying rates on bankers' acceptances and on Government securities bought under resale agreement. The expanded reports were required to be made by telegraph following each meeting of the board of directors of each Federal Reserve Bank, indicating the action taken by the directors, either in approving continuance of the existing rates or in recommending any changes therein.

The principal procedural development during the thirties was the amendment of section 14 (d) by the Banking Act of 1935 to require that discount rates be established "every fourteen days, or oftener if deemed necessary by the Board".

As pointed out in the answer to Question A-1, one of the provisions of the Banking Act of 1935 required the Board to keep a complete record of all of its actions of policy and to include in its annual report to Congress a full account of all such policy actions. In view of this requirement, the Board requested the Federal Reserve Banks to include in their telegrams recommending changes in discount rates a definite statement in each case of the reasons underlying such action. It was made clear, however, that such a statement of reasons ordinarily would not be included in a telegram merely advising the Board of establishment without change of pre-existing rates.

During recent years no important changes have been made in the procedure for setting discount rates. However, as the result of the growing national character of the credit market, the recognized close interconnection between discount rates, open market operations, and changes in reserve requirements, the supplementary though subordinate role in national credit policy of selective credit regulation, and the significantly greater part which Government securities have come to have in the asset structure of banks and other lenders, it has become general practice for the Federal Reserve Banks to act uniformly in fixing discount rates and to give special consideration to their relation to other instruments of credit and monetary policy and to their effects upon the market for Government securities. For example, in October 1942, after considerable previous discussion with the Presidents of the Federal Reserve Banks, the Board approved the establishment at all Federal Reserve Banks of a uniform preferential discount rate of one-half of 1 percent for advances to member banks collateraled by Government securities having maturities of one year or less. This action was taken in support of the Treasury's war financing program and was designed to encourage banks to invest more of their excess reserves in short-term Government obligations. Subsequently, after the end of the war, the preferential rate on advances secured by such short-term Government securities was eliminated by all of the Federal Reserve Banks after considerable advance discussion within the Conference of Presidents of the Federal Reserve Banks, as well as by the Federal Open Market Committee, and with the Secretary of the Treasury. These actions were approved by the Board.

At the present time, the procedure for the setting of discount rates, as it has evolved over the years, is generally as follows:

Each Friday the Board considers all actions taken by the Federal Reserve Banks during the preceding week to establish discount rates, usually action to re-establish the existing rates. The possible desirability of any prospective change in discount rates is usually considered in advance by the Board with the Presidents of the Federal Reserve Banks and the Federal Open Market Committee in the light of changing credit conditions, including the Government's financing needs and current trends in the economy generally. Whenever it is determined that as a matter of policy there should be a change in rates, action to establish such a change usually is taken uniformly by the boards of directors (or executive committees) of the several Federal Reserve Banks at their next meetings following such determination. Thus, in August 1950, after consultation between the Board and the Federal Open Market Committee, as one measure for restraining credit and monetary expansion, a discount rate of 1¾ percent—initially proposed by the Federal Reserve Bank of New York—was established at all of the Federal Reserve Banks and that rate prevailed at the end of 1951.

In accordance with the procedures established many years ago, as previously indicated, whenever discount rates are changed, the action is announced simultaneously by the Board and the Reserve Bank at the end of the day on which the Board acts and the new rates are made effective on the next business day following the day of the announcement.

Relative authority of the Board and the Federal Reserve Banks.—The law clearly contemplates that the establishment of discount rates shall involve joint action by the Federal Reserve Banks and the Board of Governors of the Federal Reserve System. It is also clear that rates established by the Reserve Banks shall not become effective until approved by the Board of Governors. Since prospective changes in rates are ordinarily discussed in advance between the Board and the Reserve Banks, it is only rarely that action taken by a Federal Reserve Bank for the setting of discount rates is not promptly approved by the Board. On occasion, however, the Board may fail to approve or defer its approval pending discussions of System credit and monetary policies and Treasury financing policies with the Presidents of all Federal Reserve Banks or with the Federal Open Market Committee. The matter is usually discussed also with the Secretary of the Treasury.

Since the Board's authority is not limited to mere approval of rates established by the Reserve Banks, but includes power to review and determine such rates, the Board, as previously noted, has legal authority to initiate discount rates. However, methods evolved through experience for the taking of action on discount rates are calculated to avoid the development of procedural issues in this respect.

Discussion of the relationships of discount and other credit policy is given in the answer to Question C–18.

16. Trace the historical development of open market operations covering both their significance as instruments of monetary and credit policy and the nature and composition of the bodies which have successively had control over them.

Section 14 of the Federal Reserve Act authorizes the Federal Reserve Banks, under rules and regulations prescribed by the Board of Governors, to purchase and sell in the open market (1) bankers' acceptances; (2) obligations of the United States; and (3) certain types of obligations of Government agencies and of States and municipalities.

Since establishment of the Federal Reserve System, there has been a considerable increase in the scope and importance of open market operations in the implementation of the credit and monetary policy of the Federal Reserve System. At first such operations were principally transactions in bankers' acceptances. Limited operations in United States Government securities and municipal warrants were carried on primarily as a supplementary means of investing funds of individual Federal Reserve Banks or for local purposes.

Open market operations in Government securities first assumed importance as an instrument of credit and monetary policy during 1922–

23. Over subsequent years, such operations developed into a primary instrument of Federal Reserve policy. Their significance as a credit policy instrument has shifted from period to period and has been affected by their relationship to the discount and other instruments of Federal Reserve influence on the availability, supply, and cost of money.

Closely related to the increase in the importance of open market operations has been an increase in the degree of centralization and formalization in the procedure by which decisions are made concerning such operations. Decisions originally were made by individual Federal Reserve Banks. They are now made by a statutory committee composed of all the members of the Board of Governors of the Federal Reserve System and five Federal Reserve Bank presidents. Further discussion of the allocation of authority over open market operations is included in the reply to the following Question (C-17).

Chart 1 shows the variations in the components of Federal Reserve credit from 1917 through 1933 and Chart 2 in Federal Reserve holdings of Government securities by types of issue from 1933 through 1951. Together, these two charts trace through the System's history the changing role of open market operations in Reserve Bank credit outstanding.

CHART 1

RESERVE BANK CREDIT

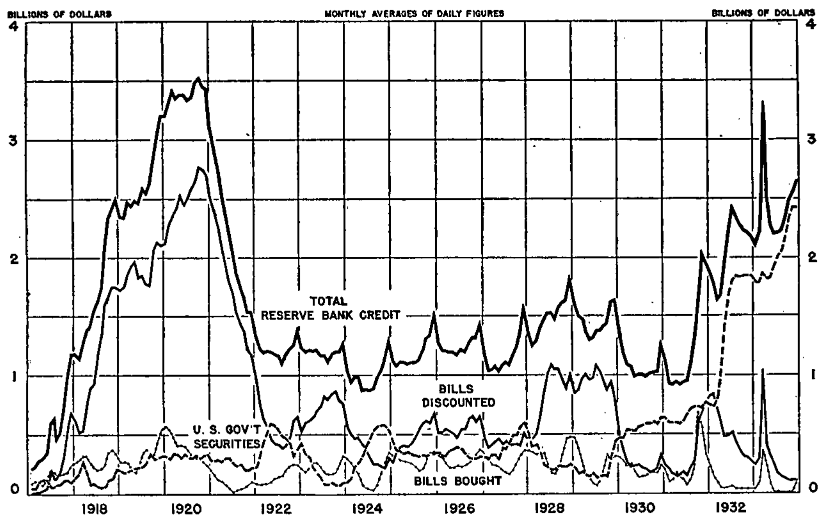
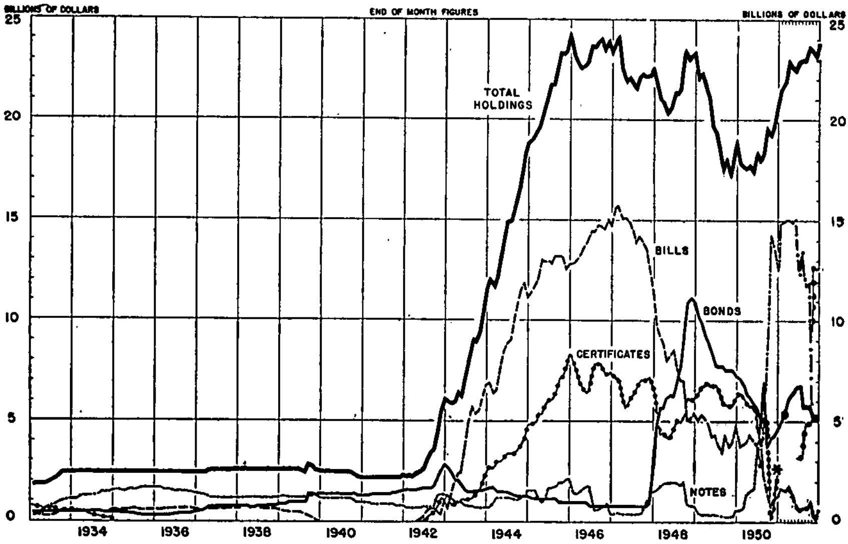


CHART 2

RESERVE BANK HOLDINGS OF U. S. GOVERNMENT SECURITIES



The period 1914–22.—Prior to 1922 open market operations were small in scale and in importance and were carried on largely by individual Federal Reserve Banks either to provide needed earnings or to meet local conditions. Under Section 14 of the Federal Reserve Act, the Federal Reserve Board had been empowered to prescribe the regulations under which Federal Reserve Banks might engage in open market operations. Late in 1914 the Board prescribed that the Reserve Banks might purchase Government securities as they saw fit. In 1915 it prescribed eligibility requirements for municipal warrants and bankers' acceptances. In addition, it required that small purchases be made of United States Government securities directly from member banks in order to aid in the retirement of national bank notes. Subject to these regulations, operations in Government securities and municipal warrants in this period were made by the Federal Reserve Banks on their own initiative and primarily with regard to the utilization of their own resources.

In this formative period of the System, the development of the use of bankers' acceptances to finance foreign and other trade was actively promoted by the Federal Reserve and various banking and trade groups. The principal reason for promotion of this type of financing was to provide in the money market a larger volume of prime short-term, self-liquidating paper particularly suitable for purchase by the Federal Reserve to meet seasonal and other temporary credit needs. Federal Reserve Banks established rates at which they would buy bankers' acceptances, and these rates were generally below the established rates on advances to or discounts by member banks. The Federal Reserve acceptance portfolio reached its pre-1931 peak in the period of credit stringency early in 1920.

Federal Reserve purchases of United States Government securities played very little part in financing the First World War, although some minor purchases were made both directly from the Treasury and in the open market. Prior to the last quarter of 1920, Federal Reserve holdings of Government securities were smaller than those of bankers' acceptances. Aside from the freeing of reserves by a statutory reduction in reserve requirements in 1917, rediscounting for member banks was the principal method by which banks were supplied with reserve funds for the currency and deposit expansion which attended the financing of the war. It had been expected that the rediscount process would be the means by which the Federal Reserve Banks would make credit available in peacetime to finance commerce and industry, and the same method was utilized to make credit available to the Treasury in wartime. The public was encouraged to borrow from commercial banks in order to purchase securities, and commercial banks were encouraged to borrow reserves from the Federal Reserve Banks.

The period 1922–33.—Beginning in 1922 the effects of open market operations upon the economy were an increasingly important consideration in decisions to operate in the open market, and open market operations soon became a major instrument for carrying out credit policy. As a corollary development, a more centralized organization for making and carrying out open market policy came into being.

In May 1922 a Committee on Centralized Execution of Purchases and Sales of Government Securities was organized at a conference of Governors of the Federal Reserve Banks. The position of Governor then corresponded to the present position of Reserve Bank President. This committee, consisting of the Governors of the Federal Reserve Banks of Boston, New York, Philadelphia, and Chicago (and, beginning in October, Cleveland), was originally organized merely to execute decisions made by individual banks on their own initiative and thus to avoid the disrupting effects of large competitive orders on the Government securities market. In October the committee's duties were extended to include the making of recommendations from time to time concerning the advisability of purchasing or selling securities. Such recommendations, however, were not binding on the Federal Reserve Banks.

On March 22, 1923, the Federal Reserve Board passed a resolution creating the Federal Open Market Investment Committee. Although this committee had the same composition as the preceding committee, a more formal basis was now provided for its organization, and the resolution required that the committee give primary consideration to the accommodation of commerce and business and the effect of purchases or sales of securities on the general credit situation. The requirement for giving primary attention to general rather than local conditions was strengthened by the provision that recommendations be submitted to the Board for approval. Although the recommendations were generally followed, each Federal Reserve Bank, nevertheless, retained formally the authority to decide whether or not to follow committee recommendations. In 1923, operations were facilitated by the organization for the first time of a System open market account, participation in which was allocated among the Federal Reserve Banks, for carrying on transactions authorized by the Open Market Committee, although the individual Reserve Banks continued to maintain small separate accounts of their own as well.

One effect of this formal procedure was to establish that open market operations were not to be conducted for the purpose of adding to earnings of the Reserve Banks. Such earnings as did result from joint open market operations were henceforth made available to the individual Reserve Banks in accordance with their allotted participations in the System Open Market Account. The actual open market purchases during the twenties had the effect of reducing rather than increasing Reserve Bank earnings since the funds supplied were generally used to pay off member bank rediscounts. Rediscount rates were ordinarily above the rates on paper bought in the open market.

A further change was made in open market procedures on March 25, 1930, when the Open Market Policy Conference was created. The new committee was composed of a representative of each of the 12 Federal Reserve Banks. An executive committee of five, composed of representatives of the five Banks which had been represented on the Open Market Investment Committee, was appointed to do much of the month-to-month work. The Federal Reserve Board was authorized to call meetings of the committee and to take part in discussions. Each Bank, however, still retained as a formal matter the right to decide whether or not it would participate in transactions.

After 1922 transactions in Government securities were carried on primarily with regard to their effect on credit and monetary conditions and as an essential part of the System's general credit and monetary policy. In this connection they were ordinarily used in conjunction with changes in the discount rate. Securities were typically sold when excessive credit expansion threatened, and purchased when business activity slackened. The result of these operations was generally to affect the level of indebtedness of member banks. When the Federal Reserve sold securities to member banks or their customers, for example, the banks lost reserves and, having no excess reserves to start with, had either to go further into debt or to contract credit. As some banks were able to reduce borrowings, other banks found it necessary to increase theirs, and up to the early thirties member banks as a group were constantly in debt to the Reserve Banks.

For a variety of reasons, as explained in the reply to Question F–35, banks disliked being continuously in debt and hence tended to contract credit when the level of indebtedness was increased and to expand credit when the level of indebtedness was reduced. Because of this tradition against continuous borrowing, when the Federal Reserve System sold securities, the resulting increase in indebtedness tended to cause banks to contract credit. Moreover, open market sales of securities were generally accompanied by an increase in the discount rate, which made borrowing more expensive. Conversely, when the Federal Reserve purchased securities, member banks were supplied with reserves which could be used to reduce their indebtedness. The reduction in indebtedness tended to make them less interested in liquidating loans or investments and more willing to expand credit. At the same time, a decrease in the rate of discount made it cheaper to obtain reserves to meet unforeseen drains of funds.

As a major part of Federal Reserve credit policy, the System sold securities in 1923, early 1925, and 1928–29, in order to restrain credit expansion, and purchased securities in 1924 and 1927, when there was a slackening in the level of business activity. From the fall of

1929 until 1933, purchases were made on a large scale in order to moderate the liquidation following the stock market crash. At first purchases were made to enable New York banks to take over the security loans which had been called by other lenders without forcing these banks to increase their own indebtedness. Later purchases enabled banks generally to maintain their reserves and reduce their indebtedness below the 1928–29 level at a time when economic developments, including in particular currency hoarding, were depriving them of reserves and when bank failures were strengthening bankers' aversion to continuous borrowing. Purchases were suspended in late 1931 because of the shortage of backing for Federal Reserve notes, but after the Glass-Steagall Act, passed early in 1932, made United States Government securities eligible as collateral, purchases were resumed on a large scale.

During this period, open market operations in bankers' acceptances were actively engaged in and were at times of greater importance than those in Government securities. The Federal Reserve Banks purchased prime bankers' acceptances at the seller's initiative. Minimum buying rates were set for different maturities by the Federal Reserve Banks, subject to review and determination by the Federal Reserve Board. The acceptances bought were generally held until maturity. Most of these operations were carried out in New York, and the currently effective buying rates used by that Bank were generally slightly above the minimum rates approved by the Board and were changed frequently in response to market developments.

In order to encourage the development of the acceptance market and the use of bankers' acceptances to raise funds for seasonal and other temporary needs, the Federal Reserve buying rate on acceptances was generally below the discount rate on loans to member banks and considerably more stable than most short-term rates in the market. Moreover, the tradition against borrowing on the part of banks did not apply to the sale of bankers' acceptances. For these reasons, adjustments to losses of reserves through open market operations in Government securities or otherwise were typically made to some extent through the sale of acceptances to the Reserve Banks. Conversely, when the supply of reserves was increased, fewer acceptances were offered to the Reserve Banks, and holdings consequently declined as acceptances in the portfolio matured. There were substantial seasonal variations in the total amount of acceptances outstanding which corresponded with seasonal changes in currency and credit demands. Thus, sales of acceptances to the Federal Reserve conveniently met seasonal reserve needs and the subsequent payment of the bills absorbed seasonal increases in reserve funds.

Generally the buying rate on acceptances was raised when the discount rate was increased, thus making it more expensive to obtain reserves through this channel also, and lowered when the discount rate was reduced. In 1928 and again in 1929, the maintenance of Federal Reserve bill buying rates substantially below market rates and the Federal Reserve discount rate resulted in larger than usual sales of acceptances to the Federal Reserve. These sales reduced somewhat the possible restrictive effect of the higher discount rate. During emergency periods in the autumn of 1931 and again in the spring of 1933, large-scale Federal Reserve purchases of acceptances, although at increased rates, helped to provide needed reserves.

The period 1933–41.—As a result of the recognition of the importance which open market operations had assumed in System credit policy prior to mid-1933 and their potential importance in the future, the procedure for making decisions concerning open market policies was further formalized and centralized in the period 1933–36.

The Banking Act of 1933, passed on June 16, 1933, for the first time gave an explicit statutory basis for the organization of an open market committee. The Federal Open Market Committee thus established, like the Open Market Policy Conference, was composed of one representative from each Federal Reserve Bank. Meetings might be called at the initiative of either the Governor of the Federal Reserve Board or any three members of the Committee. Members of the Board were authorized to attend the meetings of the Committee. Regulations relating to open market operations were issued by the Federal Reserve Board. These regulations, in addition to requiring approval by the Board of Committee actions, gave the Board somewhat more authority to initiate consideration of policies and also restricted somewhat the independent action of individual Federal Reserve Banks in the market. The Federal Reserve Banks, however, retained authority to decide whether or not to participate in System operations as well as authority to carry on local operations themselves.

Through the Banking Act of 1935, an Open Market Committee was organized which included the members of the Board of Governors of the Federal Reserve System and five representatives of the Reserve Banks, and all decisions concerning open market activities were concentrated in the hands of this committee. The representatives of the Federal Reserve Banks were to be chosen one each from the following five groups: (1) Boston and New York; (2) Philadelphia and Cleveland; (3) Chicago and St. Louis; (4) Richmond, Atlanta, and Dallas; and (5) Minneapolis, Kansas City, and San Francisco. Because the New York Reserve Bank is located in the principal money market and is the bank through which System open market operations are conducted, a regrouping was authorized by law in 1943 to provide for continuous representation of the New York Bank on the Committee. Accordingly the group was reconstituted as follows: (1) New York; (2) Philadelphia, Boston, and Richmond; (3) Cleveland and Chicago; (4) Atlanta, St. Louis, and Dallas; and (5) Minneapolis, Kansas City, and San Francisco.

The Federal Open Market Committee was given authority to direct all operations, without the necessity of consent by the individual Banks; and under authority of the Act, the Committee required that all securities held in the separate investment accounts of the individual Reserve Banks be transferred to the System account. Thus, the Board of Governors of the Federal Reserve System, which is concerned with national rather than with regional matters and which had also been made responsible for changes in reserve requirements, was given majority representation on the Committee; and for the first time the Committee was able to make all decisions concerning purchases and sales without the delay occasioned by Reserve Bank authorization. The Committee, which is required by law to meet at least four times annually, appointed an executive committee of five to carry out the policies of the full committee, and the Federal Reserve Bank of New York was selected to execute transactions for the purpose of carrying out the policies of the Committee. This organization has continued up to the present.

In the period from late 1933 until the spring of 1942 there was less occasion for open market operations than at any other time since the early years of the System. Depressed business conditions continued for a part of the period and accounted for a low level of credit demand. At the same time, a large gold inflow flooded the banks with an unprecedented amount of reserves. These reserves enabled the banks not only to pay off their indebtedness while their deposits were expanding, but also to build up excess reserves to a level of 3 billion dollars by 1936. At that time excess reserves could have formed the basis for about 11 times their volume in deposits if an expansionary atmosphere had pervaded the economy. System holdings of securities were not sufficiently large to absorb the excess reserves even if all holdings had been liquidated. Maintenance of the System open market account at the then prevailing level served the purpose of providing earnings necessary to meet the System's operating expenses.

It was under these circumstances that the Board of Governors first exercised the new authority granted by the Banking Acts of 1933 and 1935 to alter percentage reserve requirements of member banks. Reserve requirements were increased by 100 percent to their statutory maximum in three stages in 1936–37 and then reduced by about one-eighth in 1938. Excess reserves continued to grow during most of the period, reaching a level of almost 7 billion dollars in late 1940. Concerned about the dangers of inflation accompanying a high level of defense expenditures, the Board of Governors, the Presidents of the Federal Reserve Banks, and the Federal Advisory Council submitted a special report to Congress on December 31, 1940, in which they recommended, among other things, that the statutory minimum and maximum reserve requirements for the various classes of banks be doubled and that reserve requirements be made applicable to nonmember banks. In November 1941, member bank reserve requirements were raised to the maximum possible under the Banking Act of 1935. Although deposits also increased during 1941, excess reserves were still over 3 billion dollars at the end of the year.

During the period from late 1933 until early 1937, the Federal Reserve maintained its holdings of United States Government securities at a constant level. Thereafter, it made occasional portfolio changes associated with maintaining orderly conditions in the market for Government securities. Government securities had become more important both as a part of total public and private debt outstanding and as a part of bank assets, and it was considered desirable to protect security markets against precipitous movements such as those which had occurred in the period 1931–33. Hence securities were purchased in 1937, when liquidation followed the increase in bank reserve requirements; in September 1939, when the market reacted to the beginning of war in Europe; and in December 1941, when the United States entered the war. Conversely, bills were allowed to run off in 1938–39, and other securities to decrease after October 1939.

In its annual report for 1937, the Board of Governors gave the following explanation of the intervention in that year:

> Intervention by the Federal Reserve System in the bond market in March and April, therefore, helped to stabilize that market. In recent years the bond market has become a much more important segment of the open money market,

and banks, particularly money-market banks, to an increasing extent use their bond portfolios as a means of adjusting their cash position to meet demands made upon them. At times when the demands increase they tend to reduce their bond portfolios and at times when surplus funds are large they are likely to expand them. Since prices of long-term bonds are subject to wider fluctuations than those of short-term obligations, the increased importance of bonds as a medium of investment for idle bank funds makes the maintenance of stable conditions in the bond market an important concern of banking administration.

In its annual report for 1939, the Board explained the reason for the open market purchases in that year as follows:

In undertaking large-scale open market operations in September 1939, the System was guided principally by the following considerations:

(1) By helping to maintain orderly conditions in the market for United States Government securities the System can exert a steadying influence on the entire capital market, which is an essential part of the country's economic machinery, and disorganization in which would be a serious obstacle to the progress of economic recovery. The market for United States Government securities is the only part of the capital market in which the System is authorized by law to operate, and Government securities occupy a vital place in that market.

(2) The System also has a measure of responsibility for safeguarding the large United States Government portfolio of the member banks from unnecessarily wide and violent fluctuations in price. The System cannot and does not guarantee any current prices of Government obligations, nor does it undertake to preserve for member banks such profits as they may have on their Government securities, or to protect them against losses in this account. The Government security market, however, has become in recent years the principal part of the money market, and member banks are in the habit of adjusting their cash positions through sales and purchases of United States Government securities. This practice has arisen partly because of a shrinkage in the availability of other liquid assets, such as street loans and bankers' acceptances, which in earlier years were in much larger volume and were the medium through which banks were likely to adjust their positions. In the enhanced importance of the Government portfolio to member banks, the System sees an additional reason for exerting its influence against undue disturbances in Government security prices.

On September 1 the System announced that all the Federal Reserve banks stood ready to make advances on Government securities to member and nonmember banks at par and at the discount rate. The discount rate at the time was 1 percent in New York and 1½ percent at the other Reserve Banks. During September the rate for such advances was reduced to 1 percent at six Federal Reserve Banks. The purpose of the announcement and of the reduction in the discount rates was to assure all banks, as large holders of Government obligations, that a temporary decline in prices of Government securities should not be regarded as an occasion for selling these securities, as, in case of need, these holdings could be the basis for obtaining their par value in cash at the Federal Reserve Banks.

The period 1942–June 1949.—When the United States entered the war in December 1941, the Board of Governors of the Federal Reserve System issued the following statement with respect to war finance:

The financial and banking mechanism of the country is today in a stronger position to meet any emergency than ever before.

The existing supply of funds and of bank reserves is fully adequate to meet all present and prospective needs of the Government and of private activity. The Federal Reserve System has powers to add to these resources to whatever extent may be required in the future.

The System is prepared to use its powers to assure that an ample supply of funds is available at all times for financing the war effort and to exert its influence toward maintaining conditions in the United States Government security market that are satisfactory from the standpoint of the Government's requirements.

Continuing the policy which was announced following the outbreak of war in Europe, Federal Reserve banks stand ready to advance funds on United States Government securities at par to all banks.

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The organization of the Open Market Committee resulting from the changes of 1935 and 1936 proved effective in carrying out these objectives. Close cooperation was maintained with the Treasury Department throughout the war and the immediate postwar period in order that Federal Reserve policies would be related to the needs of war finance.

Although there was general agreement on the desirability of financing the war so far as possible by means of taxation, it was evident that Treasury borrowing on an unprecedented scale would also be necessary. In order to avoid encouraging the withholding of investment funds in anticipation of higher interest rates, as well as to keep down the cost of borrowing to the Treasury, the decision was reached to finance the war at the level and structure of rates prevailing at the outbreak of war, except for a very slight increase in short-term rates. The rates thus determined for war finance ranged from three-eighths of 1 percent on 91-day Treasury bills to 2½ percent on the longest-term bank-restricted bonds. These rates were a heritage from the depressed economic conditions of the previous decade and were considerably below rates which had prevailed during periods of active demand for funds in the past. Short-term rates in particular were abnormally low, both in their general level and in their relationship to long-term rates, as a result of the extreme pressure for liquidity and the scarcity of short-term securities during the thirties. Chart 3 shows the yields on short-term and long-term Government securities beginning in 1919.

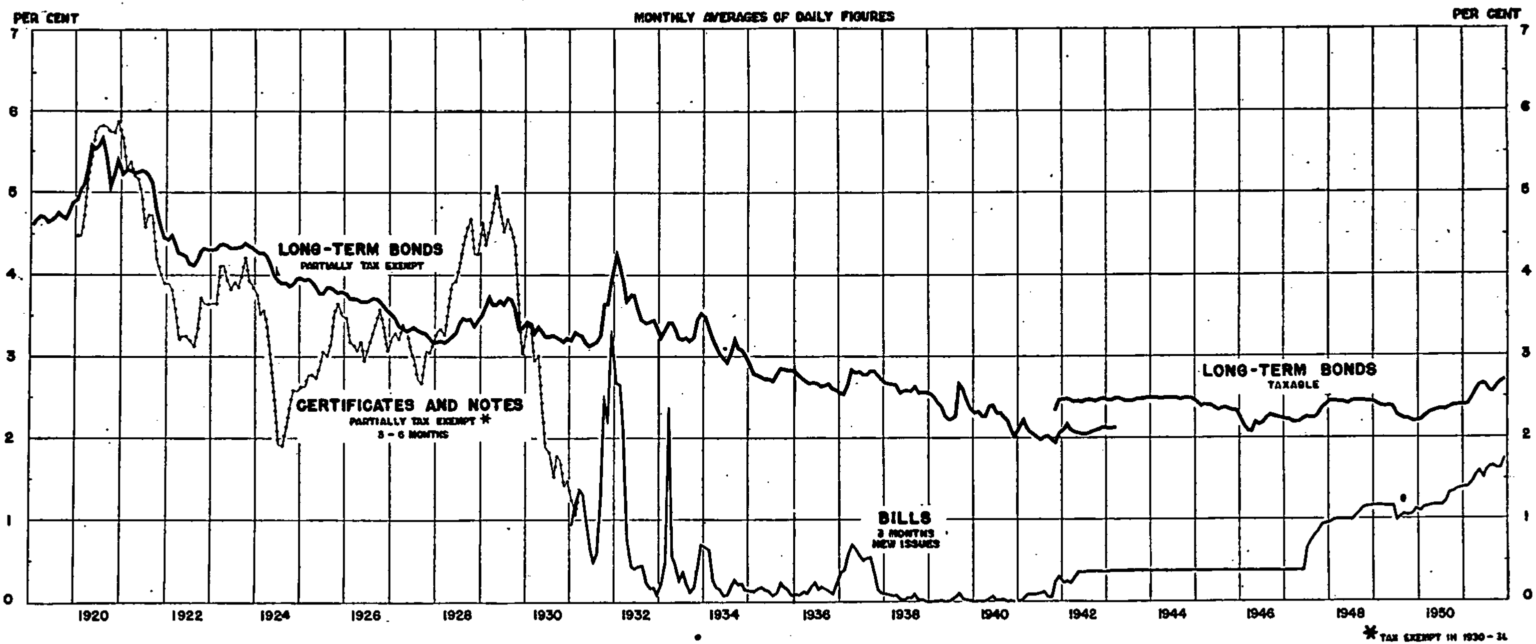
It was evident that all funds needed for financing the war which were not raised by taxation or by the sale of Government securities to nonbank investors would need to be raised by the sale of securities to the banking system. At first commercial banks were able to draw down excess reserves by several billion dollars, but later they had to be supplied with a considerable amount of additional reserve funds in order to purchase the necessary securities and at the same time meet a sizable currency demand and a moderate outflow of gold. Reserves were freed to some extent by a reduction in the reserve requirements of central reserve city banks and by the exemption of Treasury war loan deposits from reserve requirements, and banks borrowed a small amount at a preferential discount rate from the Federal Reserve Banks.

In general, further reserve funds were supplied by Federal Reserve purchases of short-term Government securities. Purchases of Treasury bills were made under a procedure similar to that for purchasing bankers' acceptances two decades earlier; that is, the Federal Reserve Banks stood ready to purchase offerings at a discount of three-eighths of 1 percent per annum. This rate, however, was not adjusted in accordance with market conditions, as had been the practice with the buying rates on acceptances, but remained unchanged until 1947. As a result of the very low fixed rate, the Federal Reserve gradually acquired most of the bills outstanding. Substantial purchases were also made of other short-term securities at rates of around seven-eighths of 1 percent for 1-year issues.

By the end of the war, an unprecedented volume of United States Government securities was in the hands of both bank and nonbank investors. The net Federal debt (that held outside Federal agencies and trust funds) had increased from 43 billion dollars, less than 25

CHART 3

YIELDS ON U. S. GOVERNMENT SECURITIES



percent of total public and private debt, at the end of 1940 to 252 billion, over 60 percent of the total debt, at the end of 1945. On the latter date, about 35 percent of the net Treasury debt was held by commercial banks, somewhat less than 10 percent by Federal Reserve Banks, about 15 percent by insurance companies and mutual savings banks combined, and about 40 percent by all other investors. All the major classes of investors had increased their holdings of Government securities both in dollar amount and as a proportion of their total assets. Many of them had purchased such securities because of patriotic motives, and others had purchased them because of the unavailability of other investment opportunities. Investors generally had purchased the securities at the low interest rates at which the war was financed.

In view of the increase in the importance of the Government debt and its distribution among investors, shifts in holdings of Government securities by investors were bound to have much more important effects in money markets, upon the utilization of savings, and on the general credit situation than at any previous time. Such shifts would be affected by anticipations as to changes in interest rates. Hence it was deemed essential that credit and monetary policies take into account possible repercussions in the Government securities market and, indeed, be directed in some degree toward preventing severe fluctuations in the prices of such securities. Likewise, it became more essential for debt-management policies of the Treasury to take into account possible consequences upon monetary policies as well as upon money markets and the credit situation in general. In the postwar transition period, therefore, the Federal Reserve continued to follow a policy of maintaining relatively stable prices for Government securities. This policy was followed even though it had the result of supplying additional bank reserves, which provided the basis for a credit expansion that helped to finance inflationary developments.

In the earlier postwar years the Treasury made use of available large cash holdings and the surplus of receipts over expenditures to retire maturing issues of Government securities, particularly those held by the Federal Reserve. Retirement of securities held by the Federal Reserve operated to reduce bank reserves. In the 3-year period 1946–48, the Treasury was able to reduce its net debt to the public by about 36 billion dollars. Somewhat less than two-thirds of the debt retirement resulted from the drawing down of previously accumulated Treasury deposits with commercial and Federal Reserve Banks, and somewhat more than one-third from a cash operating surplus. Retirements included about 14 billion dollars of securities from the Federal Reserve portfolio, which tended to contract bank reserves.

The effect of these retirements on reserves, however, was offset to a large extent by open market purchases by the Federal Reserve in supporting the prices and yields of Government securities and further offset by a large inflow of gold. Federal Reserve purchases were made in part from commercial banks and in part from insurance companies and other investors. At first heavy purchases of short-term issues continued to be made at the low rates maintained in the war period. Banks and others sold short-term securities at these low rates and purchased the longer-term higher-yielding issues or increased credits to private borrowers. In July 1947 the posted

Federal Reserve buying rate on Treasury bills, which had been fixed at three-eighths of 1 percent, was eliminated. Rates at which the System purchased certificates were also raised, and the Treasury increased the coupon rates on new issues of certificates. The higher rates encouraged the purchase of short-term Government securities by some banks and other investors and restrained somewhat the selling of such securities by others.

Beginning late in 1947 great pressure developed for liquidation of long-term Treasury bonds by institutional investors to obtain funds for other uses, and from December 1947 to October 1948 the Federal Reserve made large-scale purchases of bonds to support the 2½ percent yield on the longest-term restricted bonds outstanding. In this manner investors were supplied directly with investment funds and commercial banks were supplied with reserves. At first such purchases were more than offset by Federal Reserve sales and cash redemptions of short-term securities. The gold inflow and a reduction of currency in circulation, however, enabled member banks to maintain their reserves, and they continued to reduce their holdings of Government securities in order to expand private credit. After May 1948 the Federal Reserve security portfolio increased and bank reserves expanded.

In order to absorb a portion of bank reserves and thus to restrict the availability of credit, the Board of Governors of the Federal Reserve System raised the reserve requirements of central reserve city banks early in 1948 and, under authorization of special legislation permitting a temporary increase above the maximum prescribed in the Banking Act of 1935, increased reserve requirements of all classes of member banks in September 1948. The discount rates of Reserve Banks were also increased during this period. Some purchases of bank-held securities were made to facilitate the adjustment to increased reserve requirements.

By the end of 1948 the demand for funds had become less urgent and the pressure for liquidation of Government securities had subsided. The Federal Reserve began to sell bonds in order to meet a strong market demand and to keep yields generally stable. Early in 1949 it became clear that inflationary forces in the economy had abated and that a less restrictive credit and monetary policy could be adopted. In May reserve requirements of member banks were reduced. Further reductions in reserve requirements took place at the end of June, when the special authority expired, and in August. On these occasions, the Federal Reserve supplied some short-term Government securities to meet bank demands.

The period beginning July 1949.—In mid-1949 the Federal Open Market Committee announced that henceforth open market operations would be directed more with a view to the credit needs of the economy. The following statement was made on June 28 of that year:

> The Federal Open Market Committee, after consultation with the Treasury, announced today that, with a view to increasing the supply of funds available in the market to meet the needs of commerce, business, and agriculture, it will be the policy of the Committee to direct purchases, sales, and exchanges of Government securities by the Federal Reserve Banks with primary regard to the general business and credit situation. The policy of maintaining orderly conditions in the Government security market and the confidence of investors in Government bonds will be continued. Under present conditions the maintenance of a relatively fixed pattern of rates has the undesirable effect of absorbing

reserves from the market at a time when the availability of credit should be increased.

At this time, sales of Government bonds were discontinued. Transactions in short-term Government securities were carried on with a view to the general credit situation. Holdings were reduced somewhat to meet very strong market demands resulting from decreases in reserve requirements, but not in sufficient volume to modify a policy of monetary ease. These moves were in the direction of restoring open market operations to their traditional function of influencing the availability of credit in order to curb undue expansion or contraction of lending and the money supply, although the System's responsibility for an orderly market for Government securities continued to be an important consideration.

Inflationary forces began to reappear late in 1949. Since the supply of funds in the capital market remained large, the Federal Reserve resumed sales of long-term securities. Such sales were made to meet market demands for long-term securities and discourage over-extension of private long-term financing. They were offset to a large extent, however, by purchases of short-term securities in support of Treasury refunding operations. Such purchases increased after the Korean outbreak.

On August 18, 1950, the following statement was issued jointly by the Board of Governors and the Federal Open Market Committee:

> The Board of Governors of the Federal Reserve System today approved an increase in the discount rate of the Federal Reserve Bank of New York from 1½ percent to 1¾ percent, effective at the opening of business Monday, August 21.
>
> Within the past 6 weeks loans and holdings of corporate and municipal securities have expanded by 1.5 billion dollars at banks in leading cities alone. Such an expansion under present conditions is clearly excessive. In view of this development and to support the Government's decision to rely in major degree for the immediate future upon fiscal and credit measures to curb inflation, the Board of Governors of the Federal Reserve System and the Federal Open Market Committee are prepared to use all the means at their command to restrain further expansion of bank credit consistent with the policy of maintaining orderly conditions in the Government securities market.
>
> The Board is also prepared to request the Congress for additional authority should that prove necessary.
>
> Effective restraint of inflation must depend ultimately on the willingness of the American people to tax themselves adequately to meet the Government's needs on a pay-as-you-go basis. Taxation alone, however, will not do the job. Parallel and prompt restraint in the area of monetary and credit policy is essential.

In accordance with this declared policy, yields were permitted to rise in response to market pressures. The rise was limited, however, because reserves continued to be supplied on balance by System purchases of maturing securities in support of Treasury refunding operations in excess of sales from the System account of other short-term securities at higher yields. Beginning in September the Federal Reserve also purchased long-term bonds in order to prevent or closely limit declines in bond prices, and in November System sales of short-term securities were discontinued. In January 1951 member bank reserve requirements were increased by 2 percentage points, which brought them to the statutory maximum except in the case of central reserve city banks. Further open-market purchases were made to assist in the adjustmant to the increased requirements. Developments in this period are further discussed in the reply to Question F-30.

On March 4, 1951, the Federal Reserve System and the Treasury announced the following agreement:

The Treasury and the Federal Reserve System have reached full accord with respect to debt-management and monetary policies to be pursued in furthering their common purpose to assure the successful financing of the Government's requirements and, at the same time, to minimize monetization of the public debt.

To facilitate implementation of this agreement, certain long-term securities which had been in excess supply in the market were converted into nonmarketable securities by an exchange offering of the Treasury. Following the announcement the Federal Reserve continued for a while to purchase substantial amounts of Treasury bonds, but gradually the prices at which these bonds were purchased were reduced. System buying of bonds declined in amount and eventually ceased. Federal Reserve purchases of short-term securities were promptly discontinued and subsequently System operations were small, except when necessary to aid Treasury refunding operations or to meet temporary money market needs. Short-term rates rose sharply at first and subsequently fluctuated around the Federal Reserve discount rate, largely in accordance with changes in market forces. Temporary reserve needs of banks were met to an increasing extent through borrowing at the Federal Reserve. Under these policies it was possible to conduct open-market operations more flexibly in accordance with the credit needs of the economy, with occasional support to Treasury financing, and to exercise more effective restraint on loan expansion to private borrowers.

Further discussion of open market operations and policy is given elsewhere in this set of answers, namely, the replies to Questions A-3, C-17, C-18, F-29, F-30, and F-31, and also in the answers by the Chairman and the Vice Chairman of the Federal Open Market Committee in reply to questions submitted to them.

17. What is the rationale of the present assignment of authority over open market operations to a body other than the Board of Governors? Why should the allocation of responsibility for open market policy differ from the allocations with respect to discount rates and reserve requirements? Do you consider these differences desirable? Why, or why not?

The rationale of the present assignment of authority over open market operations to a body other than the Board of Governors of the Federal Reserve System may be said to be the result of historical development and of compromise between divergent views.

When, during the early twenties, it was recognized that open market operations by the individual Federal Reserve Banks had a direct bearing upon the effectiveness of discount rates, upon national credit conditions, and upon the Government securities market, a nonstatutory System Open Market Committee composed of five Governors of the Reserve Banks was set up for the purpose of coordinating open market purchases. The need for an open market committee was given statutory recognition by the Banking Act of 1933, which established a Committee consisting of 12 members selected annually by the boards of directors of the Federal Reserve Banks.

Two years later, when the Banking Act of 1935 was under consideration in Congress, sharp differences of opinion emerged as to the composition of the Open Market Committee and the nature of its responsibility. On the one hand, there were those who felt that, in view of the importance of open market operations as an instrument of credit and monetary policy, final authority with respect to such operations should be vested in the Federal Reserve Board, which already possessed final authority over discount rates and over changes in reserve requirements. Others felt that the Federal Reserve Banks, whose funds were used in the making of open market purchases, should have the majority representation on the Open Market Committee. As the bill passed the House, it provided that the Board of Governors should have final authority over open market operations, but that the Board should be required to consult with an Open Market Advisory Committee. The Senate bill, on the contrary, provided for an Open Market Committee with final authority over open market operations to be composed of three members of the Board of Governors and two members representing the Federal Reserve Banks. As a compromise, the conference committee agreed upon a Committee of 12 members consisting of the 7 members of the Board and 5 representatives of the Reserve Banks.

It may be urged, of course, that it is illogical to distribute credit regulation authority over two separate though interlocking bodies and that, in the interests of a single national credit and monetary policy and for practical administrative reasons, the determination of open market policy, as well as the determination of discount rates and changes in reserve requirements, should be vested in the same agency of the Government. It may also be urged that authority over open market operations, along with all other authority to regulate credit, should be vested in the Board of Governors of the Federal Reserve System as the agency primarily charged with responsibility for credit policies and, therefore, the agency to which the public looks for leadership in the formulation of such policies. For other reasons, it might be urged that these authorities should be vested in the Open Market Committee.

The present arrangement, however, under which open market operations are placed under the jurisdiction of a committee representing the Reserve Banks as well as the Board is consistent with the basic concept of a regional Federal Reserve System. It provides a means whereby the viewpoints of the Presidents of the Federal Reserve Banks located in various parts of the country, with their technical experience in banking and with their broad contacts with current credit and business developments, both indirectly and through their boards of directors, may be brought to bear upon the complex credit problems of the System. It promotes System-wide understanding of these problems and closer relations between the Presidents and the Board in the determination of System policies. In practice the open market policies of the Open Market Committee and the credit policies of the Board have been coordinated and the existing arrangement has worked satisfactorily.

It is believed desirable that the Federal Reserve Banks should participate to the greatest extent practicable in the consideration and formulation of open market policies, and there appears to be no compelling reason in the public interest for disturbing the present arrangement. It is recognized, however, that this is a matter on which there may be justifiable differences of opinion.

18. Can open market policy, discount policy, and reserve requirement policy pursue different general objectives, or should these various instruments always be directed toward a common policy? When differences of viewpoint among the different policy-determining groups must be compromised in order to adopt a common policy, what are the factors of strength and weakness in the position of each of the parties to the compromise—i. e., the Board of Governors, the Federal Reserve Bank President members of the Federal Open Market Committee, and the boards of directors of the Federal Reserve Banks?

To achieve the maximum contribution of credit and monetary measures to stable economic progress with rising standards of living, open market policy, discount policy, and reserve requirement policy should be directed toward a common general objective. In working for this common objective, however, each of these instruments of credit influence is designed to operate through different, though interrelated channels. Special credit conditions may arise and necessitate the use of one or another of these instruments in ways which appear to be, or actually are, partially offset by the concurrent use of other instruments. Applicable situations arose during the postwar period of transition from war finance; they might develop in the future in connection with assuring the success of Treasury financing operations or in connection with financial tensions occasioned by unusual nonmonetary events, such as an international incident threatening actual war.

Complementary functioning of open market and discount policy.—As to the specific objectives of each of these general credit instruments, open market policy and discount policy have come to function as complementary instruments in influencing short-run changes in credit conditions with the broader purpose of long-run economic stability and welfare. Discount policy as a restrictive instrument is most effective when excess bank reserves are low, when many banks are unable or unwilling to make adjustments in their reserve position by means other than borrowing from the Federal Reserve, and when many individual banks are discounting with, or obtaining advances from, the Federal Reserve Banks. In these circumstances, open market policy may work to supplement and reinforce discount policy.

Thus, in periods when general economic and business conditions call for credit restraint, it is desirable for the Federal Reserve to reduce its portfolio of Government securities, either by open market sales or by run-off of maturing issues, in order to put pressure on bank reserve positions and to make it necessary for some banks to borrow from the Reserve Banks. At times when demands for additional credit are strong, sufficient restraint on expansion may be exercised if the Federal Reserve merely refrains from open market operations, thus making it necessary for member banks to borrow additional reserves required. Tightness in the availability of reserve funds makes the discount rate effective and puts the Reserve Banks in a position to increase the cost of borrowing at Reserve Banks, should a further measure of credit restraint prove necessary. As explained in the reply to Question F-35, continued Reserve Bank indebtedness, regardless of cost, is avoided by banks, and when indebtedness is incurred, it temporarily causes them to restrict lending or liquidate securities in order to repay such indebtedness. When the discount rate penalty to which they are subject in borrowing is increased, banks are even less inclined to remain in debt.

In periods calling for conditions of credit ease, the Federal Reserve System can purchase Government securities, thereby creating additional bank reserves and enabling the banking system to reduce its indebtedness. This also reduces the restrictive effects of borrowing and of the discount rate. At some stage the easing effect of open market operations on bank reserve positions and on general credit conditions may then be reinforced by a reduction of discount rates, with the result that it becomes less expensive for banks to borrow. The System thus can make its short-run policy of credit restraint or ease effective by coordinating the use of open market and discount policy.

Since the early twenties the Federal Reserve has made it a practice to adapt its general instruments of credit policy to the maintenance of orderly conditions in the money market, and during immediate prewar years and also in recent postwar years such adaptation has involved use of the open market instrument for keeping orderly conditions in the Government securities market. During much of the postwar period, when inflationary pressures were strong, open market operations were for the purpose of supporting Government security prices and such operations were necessarily in conflict with broader objectives of long-range economic stability.

Orderly markets mean markets without "air pockets," that is, markets where there is a degree of continuity between demand and supply at going or moderately changed prices. Orderly markets preclude erratic movements of prices and yields of securities that have no justification in terms of general economic and credit conditions, but they do not preclude broad movements that reflect changes in basic underlying forces.

Open market operations to assure orderly conditions in the Government securities market may be undertaken frequently but ordinarily in relatively moderate volume. Thus, for example, they may be used to facilitate Treasury financing operations or to cushion the disturbing effects on bank reserves and interest rates of such developments as large seasonal currency movements and periodic tax payments.

If Government securities are available on terms that make them attractive to the market, they will not require open market operations in a volume that would be in conflict with the credit and monetary objectives appropriate to the period. On the rare occasions when this may not be true, say in the case of the outbreak of a war or an economic crisis, the Federal Reserve System, as well as other Government instrumentalities, must have the tools at hand and the will to use them so that the necessary stabilizing action can be taken through monetary and other measures.

The Federal Reserve System was established to provide greater flexibility of credit and money to meet varying needs of the economy and to avoid the money stringencies and panics that formerly recurred because of rigid structural limitations upon the supply of credit and money. In view of the importance of smoothly operating money and securities markets to the effective functioning of the economy, Federal Reserve operations to maintain orderly conditions in these markets are generally helpful. Such operations should not and need not defeat policies directed toward fostering stable economic progress and growth.

Specific objective of reserve requirement policy.—Change in reserve requirements in theory and in use is the newest of the general credit instruments and has the most widespread effects on individual banks. It may apply to all member banks or to all members in one or two of three legally defined groups, and requires important changes in customary ways of conducting bank operations. The fact that Federal Reserve increases in reserve requirements do not affect nonmember banks (except to some extent where State bank authorities may prescribe similar increases) may present administrative difficulties in their application under some circumstances. Considering that the reserve requirement instrument has been available for only a decade and a half, it is clear that much is yet to be learned from experience about its use.

On the restrictive side, an increase in reserve requirements may be the most appropriate means of offsetting large increases in the volume of bank reserves that occur as a result of such factors as a persistent and sizable gold inflow or substantial purchases of Government securities by the Federal Reserve made under exceptional circumstances. When the authority was written into the law by the so-called Thomas Amendment, it was conceived as having primarily such a purpose.

Experience has shown that the reserve requirement authority is not well adapted for restrictive use in regulating short-term changes in credit and monetary conditions. For instance, if the excess reserve position of the banking system as a whole is narrow, an increase in reserve requirements would oblige many member banks to adjust by borrowing at Reserve Banks or by selling Government securities. This is true even though many individual banks would meet the increase by a variety of other means, including reducing their excess reserves or balances with correspondent banks, or adopting a more restrictive loan and investment policy. However, an increase in reserve requirements at a time when total excess reserves in the banking system are low is likely to bring with it, within a limited period of time, heavy and urgent selling pressure on the Government securities market. When selling becomes widespread, potential private buyers may tend to hold off purchases in the expectation of a more favorable price level and this may result in substantial Federal Reserve open market operations to prevent disorderly market conditions. If member banks as a group sought to adjust their reserve positions to higher reserve requirements by sales of Government securities, virtually the entire amount of sales might need to be bought by the Federal Reserve. The net result would be: (1) a transfer of earning assets from member banks to Federal Reserve Banks; (2) temporary shock to the banking community; and (3) some impingement on bank liquidity positions; but (4) assuming only a moderate increase in reserve requirements, perhaps only a limited amount of lasting restrictive effect on over-all bank credit expansion.

What this illustrates is that the restrictive use of the reserve requirement instrument in regulating short-term changes in credit and monetary conditions frequently necessitates open market operations which have the appearance of being at cross purposes with the action on reserve requirements. Such operations, however, should not be interpreted as at cross purposes if they are designed to cushion or offset a part of the effect of the new requirement. The combined movement would have an additional restraining influence in that the liquidity of the banking system would be reduced and a larger volume of new reserves would be needed to support any subsequent expansion in bank deposits.

Reductions, in contrast to increases, in reserve requirements can be very powerful in temporary easing of credit conditions. They can be regarded as substitutes for open market operations, although in practical operation they are not as flexible in their applicability. By the use of reserve requirement changes, an easing effect may be accomplished with no increase in Federal Reserve credit outstanding, and in some instances even with a decrease in such credit. Thus, in the absence of an immediate supply of other bankable earning assets, member banks might bid so aggressively for Government securities that the Federal Reserve System, in maintaining orderly conditions in the Government securities market, might find it desirable to reduce its own portfolio by sales of such securities. In this instance, again, the open market operations would be of a cushioning character.

Reconciliation of differences in viewpoint.—As is indicated in answers to Questions B–9 and C–17, the Federal Reserve Act places ultimate determination of national credit policy in part in the Federal Reserve Board of Governors and in part in the Federal Open Market Committee whose membership includes all members of the Board and five representatives (in practice, presidents) of the Federal Reserve Banks. In the formulation of discount policy, Reserve Bank Boards of directors are authorized to establish discount rates subject to review and determination by the Board of Governors. In addition, Reserve Bank directorates perform consultative and advisory functions with respect to the nature of current economic and credit developments and appropriate System credit policy in the light of those developments. The mechanism for determination of System policy places particular emphasis on a balanced view of the over-all economic and credit situation.

As to the general economic and credit situation and appropriate credit policy under particular circumstances, judgments among the individual participants in System policy formation may and do differ. There is no reason, however, for assuming that, among men selected for independence of thought and judgment, differences will generally crystallize by groups—the Board of Governors, the Reserve Bank Presidents, and the boards of directors of the Reserve Banks. Nor is there any reason for assuming that the resulting System attitude with respect to the current credit problem and needed policy must be in some sense a negotiated compromise among these groups. Since the statutory changes of the early thirties affecting System decision-making, experience in System policy formation indicates that policy positions reflect mainly the influence of individual leadership in reconciling different viewpoints and in pointing up current credit issues with the result that a consensus on policy action crystallizes. System policy experience shows, furthermore, that differences in judgment as to appropriate policies reflect primarily the special background and understanding of the policy problem on the part of individual participants in the policy formation process, and that the merging of differences of judgment into a common policy is necessarily a process of discussion and mutual understanding of the varying points of view.

Differences of viewpoint among the individuals in responsible policy authority also arise sometimes as to the use, combination of use, and timing of use of the separate policy instruments. These differences again are subject to reconciliation through discussion and mutual understanding, with a decision representing the concensus of those having ultimate policy authority, but with the judgment of those in a consultative or advisory position being a factor taken into consideration in a final determination. The formulation of national credit policy is a complex process which needs as full an analysis as possible of all relevant facts as well as the benefit of viewpoints that represent differing economic backgrounds, contacts, and experience.

D. Organization of Board of Governors

19. What qualifications are required by statute for appointment to the Board of Governors? Would you suggest any changes in these statutory qualifications?

20. Would there be any advantage in removing the present requirement of law that not more than one member of the Board of Governors may be appointed from a single Federal Reserve district? Would it be desirable to replace it by any other type of geographical limitation?

The subject matter of these two questions is closely related and, accordingly, the answers to them are consolidated.

Section 10 of the Federal Reserve Act as originally enacted provided that not more than one member of the Board shall be selected from any one Federal Reserve district and that the President shall have due regard to a fair representation of the different commercial, industrial, and geographical divisions of the country. The law also required that at least two members be persons experienced in banking or finance. In discussing the proposed qualifications of Board members, the report of the House Banking and Currency Committee on the bill which became the original Federal Reserve Act stated that "in all probability they would be not only experienced in banking but men of broad business knowledge and culture. This, however, is a matter that must necessarily be left to the appointive power, which not only should but must, in order to give good results, be vested with discretionary authority sufficient to enable it to make careful choice from among all of the best material available for such a Board." In 1922 the requirement that at least two members be experienced in banking or finance was eliminated, and it was provided that agricultural interests, as well as the interests named in the original law, should be taken into consideration in making appointments to the Board. The requirements of the statute as it exists today are as follows: "In selecting the members of the Board, not more than one of whom shall be selected from any one Federal Reserve district, the

President shall have due regard to a fair representation of the financial, agricultural, industrial and commercial interests and geographical divisions of the country."

The most important consideration in connection with the appointment of members of the Board is that they be well qualified to pass upon the difficult and complex credit and monetary problems coming before the Board and to represent the broad interest of the entire country. There is merit in having the statute refer generally, as it now does, to a fair representation of various interests so that the President may be called upon to have in mind each of these interests when making his appointments. The reference in the statute to representation of the financial, agricultural, industrial and commercial interests has not, generally speaking, caused Board members to look upon themselves as representatives of particular groups or interests or prevented them from acting in the national interest. However, provision might be made in the law not only that the President in making appointments to the Board have a due regard to a fair representation of the various interests now mentioned in the statute but also that the members appointed be representative of the general interest of the nation as a whole.

The functions of the Board require a familiarity with Government finance, money markets, banking operations, and the many and varied aspects of the nation's credit problems. Since the Board's problems thus fall chiefly within the financial field, it is essential that the members have a clear understanding of financial matters, including banking, and it is most desirable that at least some of the members of the Board be well versed in finance and banking, both by training and experience. This has usually been true with respect to the past membership of the Board, but it is believed that it should be made a requirement of the statute, as it was from 1913 to 1922, that at least two members of the Board be experienced in banking or finance.

While some geographical limitation on the selection of Board members is desirable in order to insure that various sections of the country will be represented on the Board, it is believed that the law is presently too restrictive in providing that not more than one member shall be selected from any one Federal Reserve district. In some cases this limitation may prevent the selection of a person who is otherwise well qualified for the position simply because he happens to live in a Federal Reserve district which is already represented on the Board. For example, under the present law, if there were a member of the Board, say, from Los Angeles, California, it would not be possible to appoint another member from Seattle, Washington, nearly 1,400 miles away. The removal of the limitation on the appointment of more than one member from any Federal Reserve district would permit more flexibility and make possible meritorious appointments in situations of this kind. It is desirable, however, to retain the provision of law which requires that the President in selecting members of the Board "have due regard" to a fair representation of the geographical divisions of the country in order to insure that various sections of the country will be represented. This would be consonant with the report of the House Banking and Currency Committee on the original Federal Reserve Act, in which it was stated that:

The provision that the President in making his selections shall so far as possible select them in order to represent the different geographical regions of the country has been inserted in very general language in order that, while it might not be minutely mandatory, it should be the expressed wish of the Congress that no undue preponderance should be allowed to any one portion of the Nation at the expense of other portions.

21. What are the advantages and disadvantages of the present 14-year term of appointment for members of the Board of Governors, and the 4-year term of designation of the Chairman and Vice Chairman? Would you suggest that any changes be made in the tenure or manner of appointment of members or in the tenure or manner of designation of the Chairman and Vice Chairman?

Terms of members.—The original Federal Reserve Act provided for five appointive members of the Board (in addition to the Secretary of the Treasury and Comptroller of the Currency as ex officio members), with a 10-year term for each appointive member, so arranged that the term of one such member would expire every 2 years. In 1922 the number of appointive members was increased to 6, and in 1933 the term of appointment was extended to 12 years. The Banking Act of 1935 eliminated the ex officio members, increased the number of appointive members to seven, and their term of office was fixed at 14 years, staggered in such a way that the term of one member would expire every 2 years. There is a prohibition against reappointment after a member has served a full term of 14 years.

An advantage of a long term for any officer of the Government is that it may enable him to develop a special knowledge of the problems with which he has to deal. It has also been suggested that long terms tend to keep Government positions nonpolitical in character. On the other hand, a long term of appointment permits the theoretical possibility of the continuation in office of persons who may tend as the years go by to discharge their responsibilities with less enthusiasm or less effectiveness in the public interest.

In considering the term of office of members of the Board, it should be borne in mind that the most important consideration is obtaining properly qualified men and that the period of the appointment is necessarily secondary to that consideration. Notwithstanding the theoretical advantages of long terms of appointment for Board members, it may be that the 14-year term now provided is much longer than is necessary or desirable. Although the provision for a 14-year term was placed in the statute more than 16 years ago, no member of the Board has served a full term of 14 years.[46] A considerably shorter term, say a term of 6 years, without any prohibition against reappointment, might be sufficiently long and might be more practicable. The elimination of the prohibition of the law against reappointment of a member at the expiration of his term would permit the maintenance of a Board membership over the years having the requisite knowledge and experience regarding the Board's problems. The existing prohibition against reappointment is objectionable in that it may deprive

[46] The service of one or two members has been more than 14 years in length, but this has come about from consecutive service for two or more partial terms.

the Board of the benefit of experienced members and also may tend to make membership less desirable, since a qualified person might not be willing to be faced with the certainty of having to seek another connection at the expiration of his term. It would be desirable in any event to retain in the law a provision for the staggering of terms of Board members so that not more than one term would expire in any stated period.

Terms of Chairman and Vice Chairman.—Prior to 1935 the law was silent as to the length of time that the Governor and Vice Governor (whose titles were in that year changed to Chairman and Vice Chairman) should serve in these capacities, it being merely required that one member of the Board should "be designated by the President as Governor and one as Vice Governor of the Federal Reserve Board." The present law, in accordance with a change made in the Banking Act of 1935, requires that the President shall designate a Chairman and Vice Chairman from the membership of the Board "to serve as such for a term of four years." A possible purpose of this provision of the law was to afford a new President an opportunity to designate a Chairman and Vice Chairman of the Board. Assuming such a purpose, the provision has not worked out satisfactorily in practice because it has not been feasible to make appointments so that they would coincide with the term for which the President is elected. It might be preferable if the law were changed to provide that the President shall designate the Chairman and Vice Chairman for terms expiring on a selected date, say March 31, 1953, and on March 31 of every fourth year thereafter.

22. What would be the advantages and disadvantages of reducing the number of members of the Board of Governors or of replacing the Board by a single head?

Since 1935, the law has provided for a Board of Governors consisting of seven members, all required to devote their entire time to the business of the Board. The law provides that the Chairman of the Board shall preside at meetings of the Board and, subject to its supervision, shall be its active executive officer. Along with 5 representatives of the Reserve Banks who must be presidents or first vice presidents of Reserve Banks, the 7 members of the Board make up the 12-man Federal Open Market Committee, which chooses its own Chairman and Vice Chairman, of whom the former has always been the Chairman of the Board and the latter has always been the President of the Federal Reserve Bank of New York. The Chairman of the Board is also by law a member of the National Advisory Council on International Monetary and Financial Problems and a member of the Advisory Board of the Export-Import Bank and by executive order a member of the Defense Mobilization Board.

Over a considerable period of time there have been proposals that the membership of the Board be reduced from seven to some lesser number, such as five or three. The reason most commonly advanced for such proposals is that greater importance would be attached to individual membership and that the position would be more attractive to men of high caliber. Another reason is that Board decisions probably would be made more promptly. The timeliness of policy decisions is often extremely important and the need for expediting such decisions is strongly stressed by those students of monetary policy who have come to feel that the chief shortcoming of reserve banking policy over the years has been that important decisions have frequently come too late.

Against proposals to reduce the size of the Board, it has been maintained that the advantages of collective deliberation and judgment would be correspondingly lessened, that there is at least safety and perhaps greater wisdom in numbers, and that a reduction in the size of the Board would necessarily require reconsideration of the composition and possibly even the status of the Federal Open Market Committee. Moreover, it is believed that a smaller board would find it more difficult to operate effectively and promptly on some occasions because of necessary absences, from illnesses or other causes, and the resulting lack of a quorum.

In addition to proposals that the membership of the Board be reduced to perhaps five or three, a more sweeping proposal has recently come forward. It is to the effect that the Board and the Federal Open Market Committee both be replaced by (*a*) a Governor and two deputy Governors, with the Governor having the deciding vote, and (*b*) certain advisory committees of which one would consist of the 12 Presidents of the Reserve Banks and with which conference would be required by law whenever any major change in policy were contemplated. This appears to be the nearest approach of any public proposal to what this question refers to as "replacing the Board by a single head."

The principal argument advanced in favor of the proposal is that it would have the advantages of a Board even as small as three members, including timeliness in action, and would in addition have other advantages. The position and the responsibilities that it would carry would command a degree of consideration in the highest Government circles such as the position merits but has not always had. The position of Governor, because of its great importance and its virtual equivalence to Cabinet rank, would have a broader appeal to men of the highest ability.

The single-governor proposal has not as yet been sufficiently discussed to bring out many of the considerations that deserve to count against it. It would be much more of a departure from past practice than the other proposals which have been mentioned; and it is likely that there would be a widespread difference of opinion as to whether it would be safe to entrust the powers of the Board and the Open Market Committee relating to the stability of the economy and the integrity of money to a single official. Decisions made by a single governor, even though backed by advisory committees, might not command so much public support as decisions arrived at after thorough consideration by a deliberative body. Federal Reserve duties often involve decisions which, while in the public interest, are unpopular with some powerful groups or at least temporarily so. In contrast to a "single governor," a board, making important and difficult policy decisions such as those which must be made by the Federal

Reserve System, has the advantage of providing for the representation of different viewpoints and for full discussion of all phases of a problem before a decision is reached. The members of a board thus have the benefit of the restraining or supporting views of one another; a single governor would have to function without the benefit of such collective judgment and support. It might be that a single governor, even if counseled by the Reserve Bank presidents and other advisers, would distrust his own judgment if he thought it opposed by the Executive. In this case, the timeliness of decision would be retarded, not advanced, by the proposed innovation. It might also be that he would be—or would be thought to be—more likely to be swayed by partisan considerations or personal predilection than would a board which from its nature must frame its decisions in accordance with majority opinion.

This reply has attempted to present, as requested by the question, "the advantages and disadvantages" of various proposals with respect to the Board of Governors, without undertaking a final judgment as to where the balance of considerations may lie.

E. Earnings and Expenses of the Federal Reserve System

23. What have been the annual expenses of:

(*a*) The Board of Governors,

(*b*) The 12 Federal Reserve Banks combined (which include assessments for expenses of the Board of Governors),

for each year since the inauguration of the System? To the extent practicable, state expenses both inclusive and exclusive of reimbursable fiscal agency expenses. Relate these expenses in each year since 1919 to (i. e., express them as percentages of available figures):

(*a*) Total expenses of all member banks, and

(*b*) Gross national product of the United States.

(The purpose of these comparisons is to "deflate" the expenses of the System by factors which roughly measure its work load and reflect changes in the price level.)

The annual expenses of (*a*) the Board of Governors and (*b*) the 12 Federal Reserve Banks combined (which include assessments for expenses of the Board of Governors) are shown in the attached tables together with the suggested comparisons.

In addition, averages of the above-mentioned expense figures, by 5-year periods, are shown in a summary which follows the detailed tables of annual expenses. The summary also shows percentage increases of the averages of total expenses of all member banks and of the gross national product for similar periods.

TABLE III

Annual expenses of Board of Governors of the Federal Reserve System, 1914–50

Year	Expenses (1)	Ratio to total expenses of all member banks (percent) (2)	Ratio to gross national product of the United States [1] (percent) (3)	Year	Expenses (1)	Ratio to total expenses of all member banks (percent) (2)	Ratio to gross national product of the United States [1] (percent) (3)
1914-15	$270,221		0.00032	1933	$882,891	0.103	0.00158
1916	212,477		.00043	1934	[2] 1,266,931	.149	.00195
1917	249,302		.00040	1935	[2] 1,457,436	.175	.00202
1918	427,697		.00063	1936	[2] 1,582,447	.181	.00192
1919	558,561	0.057	.00069	1937	[2] 1,790,506	.198	.00199
1920	712,044	.058	.00080	1938	[2] 1,707,504	.192	.00202
1921	722,319	.060	.00101	1939	1,577,825	.176	.00173
1922	729,745	.064	.00100	1940	1,697,934	.184	.00167
1923	726,428	.059	.00085	1941	1,807,859	.183	.00143
1924	720,040	.056	.00084	1942	1,886,082	.188	.00117
1925	675,238	.049	.00073	1943	2,351,954	.226	.00121
1926	705,508	.049	.00073	1944	2,334,060	.207	.00109
1927	744,233	.049	.00078	1945	2,071,745	.163	.00096
1928	763,563	.047	.00078	1946	2,418,780	.165	.00115
1929	770,717	.046	.00074	1947	2,682,612	.163	.00115
1930	778,760	.049	.00086	1948	3,322,402	.185	.00128
1931	744,275	.056	.00098	1949	3,272,617	.173	.00127
1932	787,706	.069	.00135	1950	3,569,989	.177	.00126

[1] Gross national product figures used are official Department of Commerce estimates for the period 1929–50; prior to 1929, there are no such official estimates and the data used are unofficial Department of Commerce estimates which are not strictly comparable with the later years and which are tied to the later series on the basis of the relation between the two figures for 1929.

[2] Figures exclude building construction costs of $607 in 1934, $825,431 in 1935, $1,507,015 in 1936, $2,087,363 in 1937, and $106,973 in 1938.

TABLE IV

Annual expenses of the 12 Federal Reserve Banks combined, 1914–50 (Reserve Bank expenses include assessments for expenses of the Board of Governors)

Year	(1) Expenses, inclusive of reimbursable fiscal agency expenses	(2) Expenses, exclusive of reimbursable fiscal agency expenses	(3) Ratio to total expenses of all member banks of—		(4) Ratio to gross nationa product of the United States of—	
			(1)	(2)	(1)	(2)
			Percent	*Percent*	*Percent*	*Percent*
1914–15	$2,320,586	$2,320,586			0.006	0.006
1916	2,273,999	2,273,999			.005	.005
1917	8,254,477	5,159,727			.013	.008
1918	27,216,222	10,959,533			.040	.016
1919	35,965,649	19,339,633	3.66	1.97	.044	.024
1920	34,473,386	28,258,030	2.81	2.30	.039	.032
1921	37,073,599	34,463,845	3.06	2.85	.052	.048
1922	30,742,864	29,559,049	2.68	2.58	.042	.040
1923	31,676,656	29,764,173	2.57	2.41	.037	.035
1924	28,875,193	28,431,126	2.25	2.22	.034	.033
1925	27,695,493	27,528,163	2.02	2.01	.030	.030
1926	27,474,604	27,350,182	1.91	1.90	.029	.028
1927	27,874,243	27,518,443	1.84	1.82	.029	.029
1928	27,276,072	26,904,810	1.69	1.67	.028	.028
1929	29,841,788	29,691,113	1.77	1.76	.029	.029
1930	28,503,812	28,342,726	1.78	1.77	.031	.031
1931	27,254,221	27,040,664	2.04	2.02	.036	.036
1932	27,530,802	26,291,381	2.41	2.30	.047	.045
1933	31,479,859	29,222,837	3.66	3.40	.056	.052
1934	32,895,293	29,241,396	3.87	3.44	.051	.045
1935	35,838,617	31,577,443	4.30	3.79	.050	.044
1936	35,851,336	29,933,404	4.11	3.43	.043	.036
1937	32,748,314	28,886,021	3.63	3.20	.036	.032
1938	32,999,808	28,979,082	3.71	3.26	.039	.034
1939	33,585,937	28,711,763	3.75	3.21	.037	.031
1940	34,581,794	29,255,619	3.75	3.18	.034	.029
1941	41,420,736	33,058,676	4.19	3.35	.033	.026
1942	58,398,784	38,720,895	5.83	3.87	.036	.024
1943	76,230,071	43,663,301	7.34	4.20	.039	.022
1944	84,081,421	49,295,760	7.46	4.38	.039	.023
1945	80,102,003	49,794,121	6.32	3.93	.037	.023
1946	83,090,912	58,425,695	5.66	3.98	.039	.028
1947	86,021,155	66,817,988	5.21	4.05	.037	.029
1948	89,524,580	74,258,739	4.99	4.14	.035	.029
1949	93,321,710	78,964,626	4.94	4.18	.036	.031
1950	96,369,524	82,117,827	4.77	4.07	.034	.029

TABLE V

Comparisons of Federal Reserve expenses, 1914–50

Period	Average annual expenses of— Board of Governors		12 Federal Reserve Banks [1]: Inclusive of reimbursable fiscal agency expenses		12 Federal Reserve Banks [1]: Exclusive of reimbursable fiscal agency expenses		Percentage increase, or decrease (−), from previous period in— Average expenses of all member banks [3]	Gross national product of the United States
	Amount	Percentage increase [2]	Amount	Percentage increase [2]	Amount	Percentage increase [2]		
1914–1919	$343,652		$15,206,187		$8,010,696			
1920–1924	722,115	110.1	32,568,340	114.2	30,095,245	275.7		39.9
1925–1929	731,852	1.4	28,032,440	−13.9	27,798,542	−7.6	25.0	20.2
1930–1934	[4] 892,113	21.9	29,532,797	5.4	28,027,801	.8	−24.0	−28.7
1935–1939	[4] 1,623,144	81.9	34,204,802	15.8	29,617,543	5.7	−24.2	21.7
1940–1944	2,015,578	24.2	58,942,561	72.3	38,798,850	31.0	15.6	89.4
1945–1949	2,753,631	36.6	86,412,072	46.6	65,652,234	69.2	59.0	47.5
1950	3,569,989	29.7	96,369,524	11.5	82,117,827	25.1	25.1	20.2

[1] Figures include assessments for expenses of Board of Governors.
[2] Percentage increase from previous period.
[3] Figures not available prior to 1919.
[4] Exclusive of building construction costs as indicated in footnote 2 to Table III, p. 305.

24. Are the expenses and other accounts of the Board of Governors or of the Federal Reserve Banks subject to any budgetary or audit control of any other agency of either Congress or the Executive Branch of the United States Government? If not, do you believe that they should be? Why, or why not? Describe budgetary and auditing procedures now in effect.

Budgetary and audit control of Board of Governors and Federal Reserve Bank expenses and accounts

As indicated in answers to other questions, the functions and responsibilities of the Board of Governors are such that Congress has provided that they be carried out with a maximum exercise of independent discretion and judgment. Accordingly, the expenses and other accounts of the Board and the Federal Reserve Banks are not subject to any budgetary or audit control of any other agency of the Government. If through some measure of control over its finances another agency of Government were empowered to restrict operations which the reserve banking system deemed essential for the discharge of its statutory duties, there obviously would result a substitution of judgment of such other agency of Government for that of the reserve banking system, with a consequent and growing loss of effectiveness on the part of that instrumentality.[47]

The most important element in the control of expenses is the policy determination of the purposes for which the funds of the Board and the Federal Reserve Banks will be spent. It is believed that existing budget and other procedures provide an effective basis upon which these determinations can be made. The expenses of the Board of Governors have never been subjected to budgetary control by any other agency of the Government and the expenses of the Federal Reserve Banks have been subject only to the supervision of the Board of Governors as the supervisory agency of the reserve banking system of the United States. This arrangement has resulted in the maintenance by the Board and the Federal Reserve Banks of competent staffs which have been selected on the basis of training and experience and without regard to other considerations. The operations of the Board and the Banks have been conducted on an efficient, businesslike basis, and policy decisions have not been influenced in any way by the possibility that the budget of the Board or the Banks would be reduced or otherwise restricted because of decisions which, while sound from a credit and monetary standpoint, might be unpopular.

Prior to the amendment of Section 10 of the Federal Reserve Act by the Banking Act of 1933, the funds of the Board, which as then and now provided by law were derived from assessments on the Federal Reserve Banks, were considered as "public moneys" by reason of an opinion of the Attorney General. For that reason, such funds were carried on deposit with the Treasurer of the United States. These funds were under the control of the Board and were used by the Board's Disbursing Officer to defray the necessary expenses of the Board upon proper vouchers which had been administratively audited and approved by an officer designated by the Board. This Disbursing Officer prepared a quarterly Account Current which included details

[47] It is relevant to note here that despite the fact that England and France have nationalized their central banks, neither has placed the expenses of these organizations under direct government control nor the officers or employees thereof under civil service.

of funds received and disbursed. After approval by the Governor of the Federal Reserve Board, these quarterly reports were submitted to the General Accounting Office where they were audited. In addition, from time to time, the General Accounting Office made examinations of the books of the Disbursing Officer.

The amendment to Section 10 of the Federal Reserve Act made by the Banking Act of 1933 provided that funds of the Board derived from assessments on the Federal Reserve Banks should not be "construed to be Government funds or appropriated moneys" and provided further that "The Board shall determine and prescribe the manner in which its obligations shall be incurred and its disbursements and expenses allowed and paid, and may leave on deposit in the Federal Reserve Banks the proceeds of assessments levied upon them to defray its estimated expenses and the salaries of its members and employees * * *" The Senate and House reports on the Banking Act of 1933 stated that the purpose of this change was to leave "to the Board the determination of its own internal management policies." Pursuant to this authority, the Board established two accounts with the Federal Reserve Bank of Richmond similar to those previously maintained with the Treasurer of the United States. Procedures prescribed for the operation of the newly established accounts, which were subsequently consolidated into one account, were almost identical with those followed in connection with the Board's accounts formerly maintained with the Treasurer of the United States, with audits by Reserve Bank auditors twice a year, as later mentioned, being substituted for those previously made by the General Accounting Office.

Over the intervening years there have been changes, but most of these have been of a detailed character. The funds of the Board continue to be carried on deposit with the Federal Reserve Bank of Richmond, and the expenses and other accounts of the Board continue to be audited by Reserve Bank auditors chosen in rotation by the Board. In addition, in keeping with the requirements of the original Federal Reserve Act, the Board of Governors makes an annual report to the Congress which contains a report on the expenses incurred by the Board and by the Federal Reserve Banks so that the Congress is informed of these matters.

In the exercise of its statutory power of general supervision over the Federal Reserve Banks, the Board, since the inception of the Federal Reserve System almost 40 years ago, has followed the practice of reviewing and generally supervising, by budgetary means and otherwise, the expenditures of the Reserve Banks, and has conducted periodic examinations of the Banks not less frequently than once each year. The scope of the latter has embraced, in addition to the usual pattern of examinations, the audit proof and verification of earnings and the detailed review of individual expenditures. These examination and budgetary control procedures are a vital part of the Board's general supervisory powers over the Reserve Banks and should be continued.

As will be evident from the subsequent description of procedures followed, the Board has taken every reasonable precaution in the way of internal checks and controls over its own funds. The Board is satisfied that thorough audits of its accounts have been made by the

Reserve Bank auditors. In 1950 a public accounting firm of national reputation was retained for the purpose of reviewing the Board's organization and procedures, including accounting and budgetary matters. While no major suggestions were made with respect to its auditing procedures, the Board has recently decided to have its accounts audited by qualified outside auditors in order that there be no question as to the independence of these audits.

The budgetary and auditing procedures now in effect in respect to expenses and other accounts of the Board of Governors and of the Federal Reserve Banks are set forth in detail below.

Budgetary procedures, expenditure control systems, and audits applicable in Board of Governors

Budgetary procedures.—The various divisions of the Board's organization follow a procedure approved by the Board in the preparation of budgets covering their operations and conform to instructions regarding the form and detail in which the budget is submitted. Such instructions are revised as necessary to incorporate any changes designed to make the procedure more effective or more informative to the members of the Board.

The size of the budget for any division is determined primarily in the light of the functions assigned to the division by the Board. Recommendations as to the maintenance of necessary staff for the performance of these functions, which are submitted in accordance with the procedure outlined below, are a responsibility assigned by the Board to the head of each division.

When a division budget is being prepared the division head must consider the personnel required to perform these functions during the coming year. He has such consultations with other members of the staff as may be necessary and with the members of the Board who, under the Board's procedures, give primary consideration to matters handled by the division. If there is to be any material change in a division activity calling for changes in division personnel, the division head must determine on the basis of such consultation with others as may be necessary what those changes should be and the qualifications and probable classifications of any new positions in the division called for by the changes. This procedure assures that when the personal services budget of a division comes to the Budget Officer there has been a careful determination and justification of the need for the salary expenditures proposed in the budget.

The Budget Officer has authority to question any budget estimate for nonpersonal services to assure that the amounts provided are actually needed, that the policies of the various divisions in requisitioning supplies and equipment are reasonably uniform, and that needless expense is avoided.

When the budgets of all divisions are in satisfactory form they are combined into a consolidated budget which is submitted to the Personnel Committee (consisting of three members of the Board). The combined budget is then reviewed in whatever detail is deemed necessary by the Personnel Committee, including full discussion with the Budget Officer and in whatever detail is considered necessary with the respective division heads. Following this review, the budget is submitted to the Board with the recommendations of the Personnel Committee. After the individual members have had an opportunity to study it, the budget is discussed at one or more meetings of the Board in the light of the recommendations of the Personnel Committee and, with such changes as the Board may determine, is approved by the Board.

Each year the Personnel Committee reviews the budget procedure and determines in what manner and detail the budget for the succeeding year will be prepared and presented.

Expenditure control.—The Board has charged the staff with the responsibility of constantly reviewing the budget and expenditures of the Board's organization, proposals which involve increases in expenditures or material changes in the staff organization, and methods of improving and facilitating the conduct of the Board's business.

The Division of Personnel Administration has responsibility for keeping abreast of up-to-date developments in personnel administration and the utilization of personnel. Recommendations for appointment to the staff are required by the Board to be solely on the basis of merit and only of the person best qualified for the position having due regard for veterans' preference. Each appointment recommended is required to be for the purpose of filling a position authorized by the Board, and if during the year it is proposed to create a new position in the staff for which provision had not been made in the budget, the matter is submitted to and acted upon by the Board on that basis. This policy has resulted in the maintenance by the Board of a small but efficient staff.

It is the responsibility of the Budget Officer to determine that the expenditures of each division for personal services are in accordance with the budget approved by the Board and in conformity with its rules regarding employment and compensation. The Budget Officer has authority, and exercises this authority, to challenge any proposed expenditure during the year even though it is within the limits fixed by the budget. Working through the Division of Administrative Services, he conducts such studies and analyses of expenditures as may be necessary to assure that the most effective procedures are being followed in controlling the expenditure of the Board's funds, having in mind the character and scope of the Board's operations. The Budget Officer also reviews procedures involved in the utilization of equipment, supplies, materials, printing, etc., for the purpose of assuring adoption of up-to-date methods; elimination of duplication; efficient use, maintenance, and replacement of equipment; economical provision and use of supplies; the effective control and standardization of printed forms; and the revision or elimination of outmoded procedures and equipment.

The Director of the Division of Administrative Services has responsibility for reviewing day-to-day expenditures for nonpersonal services proposed by the Board's organization, and for seeing that expenditures are allowed only in accordance with the rules and policies adopted from time to time by the Board and within the terms of the Board's budget. When an expenditure is proposed which in his judgment is not justified and the proposal is not withdrawn, the matter is considered by the Budget Officer, and, if it cannot thus be disposed of, it is presented to the Board's Personnel Committee.

As a final control over expenditures, the Budget Officer submits to the Personnel Committee during the late summer of each year an analysis of expenditures for the preceding calendar year in relation to the budget estimates for that year and of expenditures for the first 6 months of the current year, on an annual rate basis, in relation to the budget for that year. The Personnel Committee reviews these expenditures and discusses with the division heads any question that might be raised with respect to the budgets or expenditures of the respective divisions.

Internal checks over expenditures include the requirement that authenticated advices of Board actions (which are recorded in the minutes of the Board) with respect to appointments, resignations, and salary changes be furnished by the Secretary's Office to the payroll office. No payments covering compensation are made unless such formal advices have been received. Likewise, all payments covering nonpersonal services are made only on properly certified vouchers which have been administratively audited to determine that services have been performed, that the proper supplies and materials have been received, and that all bills are otherwise in proper order for payment. All checks drawn upon the Board's account with the Federal Reserve Bank of Richmond in payment of salaries and other expenses are signed by the Board's Disbursing Officer and countersigned by the head or assistant head of the Board's Division of Administrative Services.

Audits.—It has been the policy of the Board through 1951 to have its accounts audited twice each year by auditors from a Federal Reserve Bank selected by the Board for the purpose. This selection has been changed every 3 years, and since the present arrangement was put into effect in 1933 the accounts of the Board have been audited by the auditing staffs of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, and Chicago. One of the audits each year has been a surprise audit and the other has been made as of December 31. As stated above, arrangements are being made, beginning in 1952, to have the Board's accounts audited twice each year by qualified outside auditors.

Assessments to cover Board expenses.—Section 10 of the Federal Reserve Act contains the following provisions:

> The Board of Governors of the Federal Reserve System shall have power to levy semiannually upon the Federal Reserve Banks, in proportion to their capital stock and surplus, an assessment sufficient to pay its estimated expenses and the salaries of its members and employees for the half year succeeding the levying of such assessment, together with any deficit carried forward from the preceding half year, * * *. (Par. 3)
>
> * * * The Board shall determine and prescribe the manner in which its obligations shall be incurred and its disbursements and expenses allowed and paid, and may leave on deposit in the Federal Reserve banks the proceeds of assessments levied upon them to defray its estimated expenses and the salaries of its members and employees, whose employment, compensation, leave, and expenses shall be governed solely by the provisions of this Act, specific amendments thereof, and rules and regulations of the Board not inconsistent therewith; and funds derived from such assessments shall not be construed to be Government funds or appropriated moneys. (Par. 4)

The Board levies assessments against the Federal Reserve Banks in December and June of each year for funds to cover its expenses for the succeeding 6 months. Funds in payment of such assessments are transferred directly by the Federal Reserve Banks to the checking account which the Board maintains with the Federal Reserve Bank of Richmond.

Budgetary procedures, expenditure control systems, and audits applicable in Federal Reserve Banks

Budgetary procedures.—Under instructions from the Board of Governors, annual budgets for each of the 12 Federal Reserve Banks and their 24 branches are submitted to the Board. The budgetary data submitted consist of:

(*a*) A basic statement showing for each major object of expenditure the amount budgeted for the forthcoming year and the expense for the preceding year. This object classification is in accordance with the detailed statement of expenses shown in the Board's Annual Report to Congress.

(*b*) A supplemental schedule showing, for the expense and budget period, a distribution of employees' salaries by activities, such as currency and coin, check collection, fiscal agency, etc. The schedule also calls for data showing the average number of employees assigned to each activity, and (in measurable activities) the number of man hours and the number of items handled.

(*c*) A detailed itemization of the expenses and budget for certain activities in which the expenditures are largely determined by policy considerations, namely, personnel, bank relations, and research.

(*d*) An explanatory statement regarding any material differences between the budget and expenses for the preceding period, any new items in the budget, any important changes in operations, and any other information which might be appropriate and helpful in the consideration of the budget.

The budget is initially prepared by the staff of each Federal Reserve Bank and after review, revision, and approval by the senior management is submitted to the Board of Directors, either directly or through a committee of directors. The boards of directors have primary responsibility for the economical and efficient operation of the Federal Reserve Banks and, therefore, the budgets are reviewied and approved by them before they are submitted to the Board of Governors for consideration. At each Bank, the individuals in charge of departmental operations have a part in the preparation of the budget and have the responsibility for the administration of their departmental budgets.

When received by the Board, the budgets are first analyzed by its staff. These analyses include comparisons of the budget figures for each Bank with that Bank's expenses for previous periods and with the budgets submitted by other Banks of comparable size, as well as comparisons with general cost and wage trends. Additional information is obtained from the Banks in cases where such action is deemed necessary. Detailed memoranda and statistics concerning significant aspects of the budgetary data are then prepared and presented along with the budgets to the Board for its formal consideration. After the budgets have been acted upon, each Bank is advised individually of the board's acceptance of its budget or of any exceptions that have been taken thereto.

The budgetary instructions provide that, after the budgets have been accepted, the Board should be advised in advance whenever it appears that expenditures for any of the object or functional classifications will exceed the budget by more than $5,000 or 10 percent, whichever is less; and that such advice is to include the probable amount of the excess and the reasons therefor.

Expenditure control systems.—The Board's controls over expenditures of the Federal Reserve Banks may be classified in three general categories:

(*a*) Expenditures for which the Board's specific approval is required on an individual basis.

(*b*) Operating expenses covered by the budgetary procedure.

(*c*) Compensation for directors, officers, and employees of Federal Reserve Banks which, under Section 4 of the Federal Reserve Act, are subject to the approval of the Board. (NOTE.—It might be mentioned that salaries constitute about 65 percent of the total operating expenses of the Federal Reserve Banks.)

Expenditures requiring specific approval.—The Banks have been advised by the Board of Governors that there are certain types of expenditures which should not be made without prior consideration and approval by the Board. Examples of expenditures which are subject to the specific approval of the Board are those for purchase of real estate for banking house purposes and for the construction or major alteration of bank buildings.

Expenditures covered by budgets.—As a corollary to the annual budgets, the following reports are submitted for each of the 12 Federal Reserve Banks and 24 branches:

(1) A monthly report showing total and reimbursable expenses classified in the same manner as that in which the budgets are submitted (i. e., by objects such as salaries, traveling, and postage).

(2) A quarterly report showing the distribution of employees' salaries and certain other data by activities such as currency and coin, check collection, and fiscal agency. The other data so reported include the average number of employees in each activity; also, the number of man hours and the number of items handled in measurable activities.

(3) A quarterly statement showing a detailed itemization of expenses for personnel, bank relations, and research activities.

All of the above data are submitted in the same form as the annual budgets, and are analyzed by the Board's staff in the light of the budgets. A consolidated exhibit, showing the reported data mentioned in (1) and (2) above for each office, is compiled by the Board quarterly and sent to each Bank.

In addition to the analysis of the quarterly reports, field surveys at the Reserve Banks are conducted by representatives of the Board's Division of Bank Operations. During these surveys, studies are made of operating procedures and of other matters relating to the cost accounting system. A staff is regularly engaged in making these surveys.

Compensation.—Compensation for directors of Federal Reserve Banks is approved by the Board of Governors. The salaries of all Federal Reserve Bank officers are fixed in advance by the Board of Directors of each Bank and are specifically approved annually in advance by the Board of Governors.

Control of salaries of employees, other than officers, in the Federal Reserve Banks is exercised by the Board of Governors through the maintenance of a salary classification plan. The present plan, an outgrowth of an earlier one, was developed using the modern management technique known as job evaluation. This installation was made in 1947 following a 2-year study carried on by the Board and the Banks under the guidance and supervision of nationally known management consultants. The classification plans, which were developed at each of the 12 Banks as a result of this study, were individually considered and approved by the Board prior to their adoption.

The classification plan consists of 16 grades each of which provides a minimum and maximum salary. The salaries paid vary from Bank to Bank because they are related to salaries paid for jobs of comparable nature in the communities in which the Reserve Banks are located. Once a year, and oftener when desirable, these relationships are checked by means of wage surveys conducted in each of the cities. Reports of these wage studies, as well as other data relating to salary payments, are sent by the Reserve Banks to the Board of Governors.

The Board of Governors maintains general contact with the operation of the classification plan, but its administration within the framework approved by the Board is the responsibility of the boards of directors of individual Federal Reserve Banks. Specific approval by the Board must be obtained, however, whenever a Reserve Bank finds it necessary to modify its over-all wage structure in conformity with changed salary relationships in the Reserve Bank city.

Audits and examinations.—At each of the 12 Federal Reserve Banks there is a resident Auditor, who is an officer of the Bank. The Board has always had a particular interest in the audit function of the Reserve Banks. Under a policy approved by the Board and by the Conference of Chairmen of the Federal Reserve Banks (who are Class C Directors appointed and designated as Chairmen by the Board of Governors), the Auditor at each Bank is responsible directly to the Board of Directors through the Chairman and the Audit Review Committee, and, in performing his duties, must not be dependent upon any executive or operating officer for the security of his position.

Throughout each year, the Reserve Bank Auditor and his staff make comprehensive and thorough audits of all phases of the Bank's operations, and the Auditor submits reports of such audits to the Board of Directors. Copies of these reports from each Reserve Bank are furnished to the Board of Governors where they are carefully reviewed. An important feature of the audit program in each Reserve Bank is the audit of expenditures, which includes a determination that the expenditures were properly authorized, appropriate, and fall within the restrictions prescribed by the Board of Directors.

In addition, as required by the Federal Reserve Act, each Federal Reserve Bank and branch is examined at least once a year by the Board's field staff of examiners, who are directed to determine the financial condition of the Bank and compliance by its management with applicable provisions of law and regulations. The Board's examiners not only examine all phases of the Bank's operations but also investigate to see that the audit program and activities of the resident Auditor and his staff are adequate and effective. In each examination of a Reserve Bank, the examiners for the Board of Governors conduct an examination of the Bank's expenditures, including a determination of compliance with the restrictions placed thereon by the Board of Governors and a review to determine that expenditures are appropriately controlled.

25. What have been the total gross earnings of the 12 Federal Reserve Banks combined in each year since the formation of the System? Give a breakdown of earnings by sources, and show profits and losses on the sale of United States Government securities for each year.

TABLE VI

Current earnings of the Federal Reserve Banks, by sources, annually, 1914–50; also net profits or net losses on sales of U. S. Government securities

Year	Current earnings						Net profits, or net losses (—), on sales of U. S. Government securities
	Total current earnings [1]	Discounts and advances	Acceptances purchased	U. S. Government securities	Industrial loans and commitments	All other	
1914–15	$2,173,252	$1,218,516	$244,664	$171,831	----------	$538,241	----------
1916	4,915,814	1,025,675	1,560,918	1,106,860	----------	1,222,361	$302,184
1917	15,982,138	6,971,479	4,951,729	2,367,989	----------	1,690,941	146,201
1918	67,312,104	48,348,007	11,939,808	3,828,782	----------	3,195,507	272,313
1919	102,378,228	80,768,144	13,994,544	5,761,300	----------	1,854,240	2,355
1920	181,279,908	149,059,825	22,020,158	7,140,615	----------	3,059,310	16,803
1921	122,861,063	109,598,675	5,234,141	6,253,854	----------	1,774,393	4,803
1922	49,716,946	26,523,123	5,628,956	16,682,463	----------	882,404	781,753
1923	50,854,953	32,956,293	9,371,288	7,444,089	----------	1,083,283	—146,387
1924	37,590,057	15,957,306	5,709,809	14,712,593	----------	1,210,349	750,392
1925	41,311,840	18,010,596	9,103,915	12,783,001	----------	1,414,328	488,866
1926	47,105,880	22,736,674	10,003,081	12,589,119	----------	1,777,006	493,715
1927	42,578,655	17,010,778	9,206,677	14,206,174	----------	2,155,026	445,829
1928	64,052,860	38,334,140	13,020,535	10,827,702	----------	1,870,483	—1,594,749
1929	70,955,496	47,843,884	12,063,349	8,163,486	----------	2,884,777	—76,134
1930	36,424,044	10,672,215	6,081,187	17,273,331	----------	2,397,311	2,849,567
1931	29,701,279	9,828,165	5,009,541	12,428,297	----------	2,435,276	2,851,148
1932	50,018,817	17,881,058	2,785,213	26,923,568	----------	2,428,978	3,701,250
1933	49,487,318	9,137,038	1,238,068	37,529,872	----------	1,582,340	1,056,246
1934	48,902,813	1,240,557	141,225	46,130,941	$137,909	1,252,181	7,992,543
1935	42,751,959	156,160	35,894	39,796,177	1,725,620	1,038,108	6,518,931
1936	37,900,639	107,584	29,592	35,181,125	1,868,767	713,571	8,902,507
1937	41,233,135	212,410	24,031	39,025,450	1,281,314	689,930	2,413,428
1938	36,261,428	123,751	2,611	34,446,249	993,420	695,397	8,275,897
1939	38,500,665	60,898	2,323	36,903,367	743,746	790,331	4,390,869
1940	43,537,805	51,188	----------	42,174,224	549,173	763,220	11,696,656
1941	41,380,095	55,934	----------	40,151,501	489,589	683,071	1,327,171
1942	52,662,704	64,521	----------	51,404,012	575,420	618,751	3,348,705
1943	69,305,715	151,915	----------	68,089,456	463,185	601,159	35,902,055
1944	104,391,829	724,113	----------	102,809,518	325,025	533,173	3,230,454
1945	142,209,546	1,977,081	110	139,552,881	113,288	566,186	3,312,628
1946	150,385,033	2,497,339	42,872	147,124,827	52,974	667,021	1,807,989
1947	158,655,566	2,194,546	3,890	155,563,861	79,643	813,626	2,639,959
1948	304,160,818	4,370,951	----------	298,903,034	56,484	830,349	6,214,838
1949	316,536,930	3,471,924	----------	312,240,932	51,293	772,781	31,361,686
1950	275,838,994	2,034,591	----------	272,915,591	126,518	762,204	36,895,754
Total	[1] 2,971,316,326	683,377,054	149,450,129	2,080,608,072	9,633,368	48,247,703	188,578,225

[1] The difference of $3,558,827 between total current earnings as shown in this table and as shown in the Board's 1950 Annual Report (p. 56) is due to the fact that net profits or net losses on sales of U. S. Government securities were included in "current earnings" during the period 1916–27 but are here excluded. Since 1927, net profits or losses on sales of U. S. Government securities have been reported as additions to or deductions from current net earnings.

26. Present classified statements of expenses of the 12 Federal Reserve Banks combined for each of the past 5 years, classifying in such detail as you consider appropriate for an analysis of the principal operations of the System.

In the following table expenses of the Federal Reserve Banks have been classified functionally in accordance with the classification that has been used within the System in the administrative review of expenses of the Federal Reserve Banks.

For the purpose of this reply, these functional expense figures have been further grouped into seven broad classes. A summary of expenses according to these groups for each of the years in the period 1946–50 precedes the more detailed table in which the expenses for the various activities are listed under the group headings. Under each caption in the detailed table there is a brief explanation of the kinds of activities or expenses included. This brief explanation, of course, does not necessarily reflect fully the extent or nature of the function listed.

Expenses of the Federal Reserve Banks include assessments against the Federal Reserve Banks for the expenses of the Board of Governors. These assessments are a part of the "General overhead" included under "A. General Administration and Policy Formulation," and are shown separately as a footnote to the summary. The credit and monetary functions which the Federal Reserve performs for the economy as a whole are carried out in part through the Federal Reserve Banks and in part through the Board of Governors.

TABLE VII

Expenses of the 12 Federal Reserve Banks combined, annually, 1946–50 (classified in such detail as considered appropriate for an analysis of the principal operations of the System)

Summary	1946	1947	1948	1949	1950
A. General administration and policy formulation [1]	$6,372,861	$7,725,799	$8,717,335	$9,144,879	$9,853,518
Ratio to total expenses (percent)	7.7	9.0	9.7	9.8	10.2
B. Domestic credit operations, regulation of credit, and bank supervision	$2,975,326	$3,207,340	$3,473,139	$3,863,563	$4,073,333
Ratio to total expenses (percent)	3.6	3.7	3.9	4.1	4.2
C. Foreign operations	$380,592	$515,109	$563,093	$540,662	$570,482
Ratio to total expenses (percent)	0.4	0.6	0.6	0.6	0.6
D. Check clearance, currency, and securities functions	$24,651,127	$28,496,401	$32,174,142	$34,379,460	$35,413,189
Ratio to total expenses (percent)	29.7	33.1	36.0	36.9	36.7
E. Fiscal agency operations	$28,542,123	$22,159,744	$18,172,799	$17,472,678	$17,324,840
Ratio to total expenses (percent)	34.4	25.8	20.3	18.7	18.0
F. Accounting, auditing, and planning functions	$3,274,027	$3,985,695	$4,474,357	$4,700,581	$4,811,299
Ratio to total expenses (percent)	3.9	4.6	5.0	5.0	5.0
G. Provision of space, personnel and equipment, and administrative services	$16,894,856	$19,931,067	$21,949,715	$23,219,887	$24,322,863
Ratio to total expenses (percent)	20.3	23.2	24.5	24.9	25.3
Total expenses	$83,090,912	$86,021,155	$89,524,580	$93,321,710	$96,369,524
A. General administration and policy formulation	$6,372,861	$7,725,799	$8,717,335	$9,144,879	$9,853,518
Ratio to total expenses (percent)	7.7	9.0	9.7	9.8	10.2
General overhead.—Includes principally salaries of senior officers and their secretaries, general traveling expenses, Federal Advisory Council and Directors' fees and expenses, and assessment for expenses of Board of Governors. Also includes various miscellaneous expenses and adjustments	$4,175,855	$4,952,716	$5,432,526	$5,419,440	$5,882,659
Research and statistical.—Represents the cost of gathering and interpreting information and preparing reports and other material for use principally of the Board of Governors, the Reserve Banks, and member banks; the preparation of the monthly review of business conditions; and the maintenance and operation of a reference library	$1,480,090	$1,819,334	$2,011,676	$2,233,313	$2,381,258
Bank and public relations.—Operations include the visiting of banks and attending bankers' meetings in furtherance of System relations;					

[1] Includes assessments for expenses of the Board of Governors, 1946, $2,259,784; 1947, $2,639,667; 1948 $3,243,670; 1949, $3,242,500; 1950, $3,433,700.

Expenses of the 12 Federal Reserve Banks combined, annually, 1946–50 (classified in such detail as considered appropriate for an analysis of the principal operations of the System)—Continued

Summary	1946	1947	1948	1949	1950
A—Continued preparing and delivering public addresses; preparing, printing, and distributing circulars covering practices and rules adopted in connection with services rendered member banks; and preparing, producing, and distributing miscellaneous bank and public relations material	$425,009	$632,684	$909,325	$1,084,127	$1,186,884
Legal.—Activities incident to the operation of the Legal Department, including legal fees and expenses paid outside counsel	$291,907	$321,065	$363,808	$407,999	$402,717
B. Domestic credit operations, regulation of credit, and bank supervision	$2,975,326	$3,207,340	$3,473,139	$3,863,563	$4,073,333
Ratio to total expenses (percent)	3.6	3.7	3.9	4.1	4.2
Bank examination.—Operations include principally examinations of State member banks and of State banks applying for membership; analysis and review of condition reports, earnings and dividends reports, and bank examination reports of all member banks. Operations also include other activities related to the supervisory function such as examinations of holding company affiliates, applications for national bank charters, and applications by national banks for authority to exercise fiduciary powers	$2,045,467	$2,282,220	$2,521,153	$2,755,590	$2,912,613
Discount and credit.—Includes all operations incident to the discount and credit function, including operations in connection with industrial loans	$424,766	$525,720	$502,784	$509,444	$513,152
Consumer credit.—Activities incident to the regulation of consumer installment credit through Regulation W of the Board of Governors	$483,499	$383,621	$437,938	$585,444	$489,075
Real estate credit.—Activities incident to the regulation of real estate construction credit through Regulation X of the Board of Governors	------------	------------	------------	------------	$145,913
Stock market credit.—Work incident to the carrying out of Regulatons T and U of the Board of Governors issued pursuant to the Securities Exchange Act of 1934	$21,594	$15,779	$11,264	$13,085	$12,580
C. Foreign operations	$380,592	$515,109	$563,093	$540,662	$570,482
Ratio to total expenses (percent)	0.4	0.6	0.6	0.6	0.6
Activities incident to the operation of a Foreign Department by the Federal Reserve Bank of New York, the net expenses of which are prorated to all Federal Reserve Banks.					
D. Check clearance, currency, and securities functions	$24,651,127	$28,496,401	$32,174,142	$34,379,460	$35,413,189
Ratio to total expenses (percent)	29.7	33.1	36.0	36.9	36.7
Check collection.—Operations include receiving, handling, and forwarding checks for collection and credit	$9,604,976	$11,972,456	$13,804,736	$14,032,297	$13,694,320
Currency and coin.—Operations include principally supplying member banks with currency and coin and handling the return flow of currency from them. Currency found unfit for circulation is canceled and shipped to the					

Expenses of the 12 Federal Reserve Banks combined, annually, 1946–50 (classified in such detail as considered appropriate for an analysis of the principal operations of the System)—Continued

Summary	1946	1947	1948	1949	1950
D—Continued					
Treasury and uncurrent coin is forwarded to the mints. Shipping charges on currency and coin to and from member banks are included in this function	$8,576,320	$9,826,652	$11,011,944	$11,801,392	$12,110,067
Federal Reserve note issues.—Includes principally the original cost and cost of redemption of Federal Reserve currency, including shipping charges; also, includes operations of the Federal Reserve Agent's Department in connection with the issue and retirement of Federal Reserve notes	$4,558,974	$4,640,690	$5,265,904	$6,384,100	$7,398,626
Securities.—Comprises principally operations incident to the custody of securities held in safekeeping for member banks and to the purchase and sale of securities for open market account and for member banks	$1,090,457	$1,188,191	$1,219,234	$1,264,996	$1,283,318
Noncash collection.—Includes operations incident to the collection and credit of maturing notes, drafts, coupons, and other noncash items for member banks	$820,400	$868,412	$872,324	$896,675	$926,858
E. Fiscal agency operations	$28,542,123	$22,159,744	$18,172,799	$17,472,678	$17,324,840
Ratio to total expenses (percent)	34.4	25.8	20.3	18.7	18.0
Treasury: public debt.—Operations in connection with the issue, exchange, and redemption of public debt securities including United States Savings bonds	$19,631,878	$15,389,512	$13,575,595	$12,864,015	$12,529,520
Treasury; depositary function.—Operations incident to the handling of Government checks and coupons and the maintenance of the United States Treasurer's general account	$2,680,349	$2,486,466	$2,428,124	$2,514,161	$2,385,752
Treasury; Federal taxes.—Work incident to withheld taxes	$446,067	$474,284	$398,834	$380,266	$876,887
Treasury; miscellaneous.—Other operations performed for the Treasury Department, including the handling of currency reports, miscellaneous foreign activities, and work incident to the operation of stabilization agreements	$601,064	$395,257	$311,433	$259,493	$197,927
Commodity Credit Corporation.—Custodian operations performed for the Corporation in connection with its various commodity programs, especially the handling of notes and warehouse receipts under the cotton program	$1,056,408	$476,010	$312,117	$726,450	$785,124
Reconstruction Finance Corporation.—Operations performed as custodian for the Corporation. (Such operations were largely transferred to the loan agencies of the Corporation in 1950)	$3,683,462	$2,730,009	$1,046,741	$649,372	$439,786
Other Government agencies.—Includes operations performed for all other Government departments and agencies for which the Federal Reserve Banks act as fiscal agents	$442,895	$208,206	$99,955	$78,921	$109,844
F. Accounting, auditing, and planning functions	$3,274,027	$3,985,695	$4,474,357	$4,700,581	$4,811,299
Ratio to total expenses (percent)	3.9	4.6	5.0	5.0	5.0
Accounting.—Operations include principally keeping member and Federal Reserve Bank accounts, maintaining the general ledger, making disbursements, and handling transfers of funds; maintain-					

Expenses of the 12 Federal Reserve Banks combined, annually, 1946–50 (classified in such detail as considered appropriate for an analysis of the principal operations of the System)—Continued

Summary	1946	1947	1948	1949	1950
F—Continued ing records and compiling reports incident to the expense accounting system; and the assembling of budget estimates and preparing statements showing a comparison of actual expenses with budget estimates	$2,251,773	$2,811,883	$3,172,306	$3,332,843	$3,387,156
Auditing.—Activities incident to auditing bank operations	$930,534	$1,039,573	$1,128,297	$1,186,680	$1,200,130
Planning.—Includes principally surveys of departments or operations, installation of new systems, and the preparation and standardization of accounting forms and instructions	$91,720	$134,239	$173,754	$181,058	$224,013
G. Provision of space, personnel and equipment, and administrative services	$16,894,856	$19,931,067	$21,949,715	$23,219,887	$24,322,863
Ratio to total expenses (percent)	20.3	23.2	24.5	24.9	25.3
Provision of space.—Includes expenses incident to operation of banking premises, including salaries, supplies, light, heat, power and water, repairs and alterations, taxes, depreciation and insurance	$5,466,318	$6,450,032	$7,373,162	$7,956,186	$8,177,081
General service.—Includes the maintenance of a guard force, receiving and dispatching mail and express, the procurement of supplies and furniture and equipment, the maintenance of a stock room, telephone and telegraph facilities, transfer files, duplicating, vault maintenance, messenger service, and the operation of bank-owned automobiles, armored cars, and trucks	$4,942,851	$5,637,937	$6,006,098	$6,329,932	$6,633,079
Provision of personnel.—Operations include the general supervision of personnel, employment, personnel records, pay rolls, job classification, personnel educational and training programs, cafeteria, and medical; also, expenditures for certain personnel benefits, such as hospital and surgical services' insurance. (Retirement system contributions are charged to the various functions.)	$3,461,717	$3,972,220	$4,176,855	$4,192,313	$4,240,119
Postage and expressage.—Expenditures for postage and expressage on all outgoing bank mail and express, except on currency and coin shipments which are charged to currency and coin function	$1,806,685	$2,175,000	$2,757,061	$2,917,780	$3,240,882
Furniture and equipment.—Represents the cost of furniture and equipment purchased; also, cost of repairing and maintaining furniture and equipment owned by the Bank. (Amounts paid for rental of equipment are charged to the various functions.)	$829,333	$1,412,750	$1,497,086	$1,683,758	$1,873,906
Insurance.—Includes principally premiums on bankers' blanket bond, workmen's compensation insurance, and fire insurance on furniture, equipment, and supplies. (Other forms of insurance are charged to the various functions.)	$387,952	$283,128	$139,453	$139,918	$157,796
Total expenses	$83,090,912	$86,021,155	$89,524,580	$93,321,710	$96,369,524

Expenses of the 12 Federal Reserve Banks combined, annually, 1946–50 (classified in such detail as considered appropriate for an analysis of the principal operations of the System)—Continued

Summary	1946	1947	1948	1949	1950
Total expenses	$83,090,912	$86,021,155	$89,524,580	$93,321,710	$96,369,524
Reimbursable expenses (detail shown below)	25,855,805	20,628,180	16,814,392	15,844,034	15,797,753
Net current expenses	57,235,107	65,392,975	72,710,188	77,477,676	80,571,771
Detail of reimbursable expenses:					
Reimbursements from—					
Treasury Department	19,590,580	15,899,673	13,883,251	12,951,694	12,975,640
Other Government agencies	5,074,637	3,303,494	1,382,590	1,405,390	1,276,057
Total fiscal agency reimbursable	24,665,217	19,203,167	15,265,841	14,357,084	14,251,697
Other reimbursements account of—					
Cafeteria receipts	984,935	1,056,223	1,120,617	1,085,449	1,036,515
Leased wire	71,374	95,920	92,008	86,428	86,606
Wrapped coin	71,702	128,307	205,202	220,809	279,776
Foreign banks and governments	26,384	94,038	68,463	51,794	74,348
Miscellaneous	36,193	50,525	62,261	42,470	68,811
Total reimbursable expenses	25,855,805	20,628,180	16,814,392	15,844,034	15,797,753

27. List and discuss any expenses which have been incurred since 1946 by the Board of Governors, or to the Board's knowledge have been incurred by the Federal Reserve Banks, for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and in connection with the management of the public debt. Expenses for the preparation of material in standard expository format and for the distribution or presentation of such material in written or oral form to persons who might be expected to have a regular business or professional interest in it may be omitted. Any expenses during this period for the preparation of motion pictures, illustrated brochures, or any other special material in these fields should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the Subcommittee may, if it desires, consider them on a case-by-case basis. (This question is to be answered in collaboration with the Presidents of the Federal Reserve Banks.)[48]

The guiding view of the Board of Governors and the Federal Reserve Banks in reports and information made available to the public is that an adequate and critical public understanding contributes to an intelligent credit and monetary policy designed to foster stable economic progress. Accordingly, the System is actively interested in disseminating factual and explanatory information on general economic conditions and on credit and monetary policies. Such is deemed to be the System's responsibility since the preservation of democratic institutions depends on an informed public opinion.

A dual purpose is served by the economic studies of the Board of Governors and the Federal Reserve Banks. They guide the System in the formulation and administration of credit and monetary policy,

[48] The answer to this question has been prepared in collaboration with the Presidents of the Federal Reserve Banks. Statements made, and information on expenses supplied, by them are presented in Exhibits B and D (pp. 325 and 334).

which requires a welding of national and regional considerations, as revealed by statistical series and comparisons, into national policies. Thus, the System, by conducting studies of regional as well as national economic conditions, improves its understanding of the requirements of appropriate credit and monetary policy. At the same time, by making the bulk of these materials available in its publications, the System helps to keep the public fully informed. Largely statistical in character, often accompanied by interpretative commentary, the System's reports serve to provide better general understanding of the functioning of the economy. They are meant to be objective, authoritative, and comprehensive discussions of economic trends.

From the standpoint of the Federal Reserve System, the scope of this work has been appropriately phrased that reserve banking operations "reflect to some extent all phases of a nation's economic life and, in turn, all parts of the economy are influenced by central banking policies."[49] The reserve banking authorities need, therefore, to have background perspective as well as current information and understanding of the major economic changes and developments taking place in the country.

From its beginning the Federal Reserve System has departed from the older view prevalent in other countries that the reasons for central banking moves to tighten or relax credit and monetary conditions should be inferred solely from the nature of the actions taken. The course pioneered by the Federal Reserve System is that explanations of policy actions and factual information which guide them should be made available to the public.

A decade after the System's founding, this view was expressed in the Board's Annual Report, as follows:

> The more fully the public understands what the function of the Federal reserve system is and on what grounds and on what indications its policies and actions are based, the simpler and easier will be the problems of credit administration in the United States. For this reason it has been the policy of the Board to inform the public, either through its official monthly publication or by statements to the press, on matters in which the public has an interest and to which its attention should be drawn. By this means the Board presents to the public a statement of the problems confronting the system and of the attitude of the Board toward current banking and credit developments. The public is a partner in the Federal reserve system. The cooperation of the public based upon an understanding of the broad outlines of Federal reserve credit policy is of the greatest advantage to a good functioning of the system.[50] * * *

The dominant place which the Federal Government has come to occupy in the functioning of the economy has made increasingly necessary a widening public knowledge and understanding of national purposes and policies. In a democracy, the best and fundamentally the only way to make wise public measures prevail, and to avoid unwise ones, is to expose them fully and fairly to public scrutiny. This continuing task imposes on public servants a clear responsibility for the fullest possible disclosure of accurate and unbiased information. It calls for discriminating judgment not only to prevent distortion or unwarranted withholding of factual material but also to present and interpret it intelligently. Such factual material and interpretation need also to be readily and widely disseminated within the bounds set by prudent expenditure of funds for this purpose. The Board of

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[49] E. A. Goldenweiser, American Monetary Policy, McGraw-Hill, New York, 1951, p. 100.
[50] Annual Report of the Federal Reserve Board for 1923, p. 38.

Governors and the Federal Reserve Banks recognize and endeavor to discharge their responsibilities for informing the public in the light of all of these considerations.

Cost of providing information to the public.—The System's activities in making material readily available to the public are largely a by-product of its regular operations. Information on current economic conditions is assembled and analyzed on a regional basis at the Reserve Banks and for the entire country at the Board of Governors in order to provide the Reserve System with a balanced background of economic conditions for considering credit and monetary policy. Much of this material becomes a part of the information which the Board and the Reserve Banks furnish to the public.

The aggregate cost of preparing such materials for System use and of distributing them to the public is represented largely by the expenses of the research and statistical and of bank and public relations activities. Over the postwar period expenses of the Federal Reserve Banks and the Board of Governors for these two activities combined increased from an estimated 2.7 million dollars in 1946 to an estimated 5.0 million in 1950, or from about 3.2 percent to about 5.0 percent of total expenses of the System.[51]

Informational activities of the Board and the Reserve Banks.—From a long-run standpoint, and in accordance with the System's general objectives, the purposes of the System's informational activities have been summarized for System guidance as follows:

(1) To explain to the banking and financial community as well as to the public generally the System's statutory purposes, responsibilities, and operations, and their relation to the functioning of the economy.

(2) To provide for mutual interchange of ideas that will keep bankers, businessmen, and the public generally informed of developments, regulations, policies, and operations of the System, and that will keep the System informed of economic and financial developments and of public attitudes toward System regulations, policies, and objectives.

(3) To make available to the interested public factual and analytical materials developed within the System that will contribute to better understanding of economic and financial trends underlying and affecting banking activities and credit and monetary policies.

The Board and the Reserve Banks have numerous and varied opportunities for presenting information to the public and for exchanging views with different groups throughout the country. For the most part, these opportunities arise from specific requests from interested persons and groups for published material, speeches, and film showings.

Publications.—The publications of the Board of Governors and the Reserve Banks are the medium most generally employed to reach many different groups throughout the country and to provide a wide variety of information on functions and operations of the System and on the economy generally.

[51] The figures include expenses of the Reserve Banks for research, statistical, and bank and public relations activities as shown in the reply to Question E–26 and estimated expenses for the major categories of similar activities of the Board of Governors, which are not so classified in E–26; total expenses used for percentages are from the reply to E–26.

The monthly Federal Reserve Bulletin of the Board and the monthly reviews of the 12 Federal Reserve Banks are the System's principal means of published communication with the member banks and the public. These are the regular publications which have the widest distribution. Through them the System reports on current policies and operations of the System and also provides reviews of current economic and financial developments, selected statistical data, and articles on special subjects. The Board's Bulletin emphasizes over-all national developments while the monthly reviews of most of the Banks pay special attention to their respective areas of the country. The Board's Bulletin also has a Law Department section, which includes administrative interpretations of the banking laws, new regulations issued by the Board, and other similar material. Articles of general interest in these monthly publications are made available separately in reprint form.

Other publications which have relatively wide circulation are the booklets: "The Federal Reserve System—Its Purposes and Functions," "A Day's Work at the Federal Reserve Bank of New York," and similar publications of other Reserve Banks; statements of System officials before Congressional committees; the annual reports of the Board of Governors and of some Reserve Banks; the monthly National Summary of Business Conditions of the Board and the agricultural and other news letters of the Reserve Banks; and the chart books, "Bank Credit, Money Rates, and Business."

Other bank and public relations activities.—Direct contacts with banks and banker groups by the Reserve Banks are inherent in their operations. Regular visits to the member banks by representatives of the Reserve Banks deal with bank operations and subjects of local interest, and also are an occasion for interchange of views on general credit and economic matters and for the Reserve Banks to become aware of banker problems and judgments on business trends. The Reserve Banks also organize meetings of bankers in small local groups and in larger groups, some of which are held in cooperation with banking organizations and schools and colleges. At these meetings information on Reserve System operations and functions and on general credit and economic conditions is presented.

An activity closely related to these banker meetings—but one which reaches groups with different economic and educational interests—is the informal talks, speeches, and lectures given by the officers and staffs of the Banks, and also of the Board of Governors, in response to requests from banking groups, business organizations, professional groups, civic associations, schools and colleges, and the like. Officers and staff also participate, on invitation, in the work of local development groups, regional economic organizations, and economic research and similar groups.

The Board on occasion has joined with individual Reserve Banks in conducting seminar sessions at the Banks and the Board through which groups of college and university teachers of money and banking are given an opportunity to become familiar with the information developed or in process of development by the System's research staff and, also, an opportunity to observe and discuss at first hand the functions and operations of the Federal Reserve Banks and the Board. These seminars aid indirectly in broadening understanding of the economy's credit and monetary mechanism.

In recent years the Federal Reserve has experimented with radio broadcasts and films as media for providing informational material and as an educational activity. A few Reserve Banks have regularly scheduled radio programs on current business conditions, but are under no expense for the broadcast time. Three sound movies, which depict the operations and functions of the Federal Reserve System, are currently available for student groups, civic organizations, and business and banker groups.

The Federal Reserve Bank of Minneapolis prepared a film covering certain aspects of the operations of a Federal Reserve Bank and designed particularly for high school students.[52] This film, as well as the Minneapolis illustrated book, "Your Money and the Federal Reserve System," was originated in part as a result of school demand for visual educational material. During the preparation period the high school authorities worked closely with the Bank; this involved discussions with specialists in visual education, checks as to understandability with sample high school classes during the process of production, and the development of teaching aids at the suggestion of the school authorities. The Federal Reserve Bank of Cleveland also prepared a film portraying the internal operations of a Federal Reserve Bank. The filming was done by the staff of the Cleveland Reserve Bank, with some professional assistance, and the expense of reproduction was carried by that Bank. These films are available to other Reserve Banks for such use as they may desire to make of them. The Federal Reserve Banks of Dallas and Boston have made minor changes in the Minneapolis film in order to adapt it for use in their districts.

As a part of the experimentation with the use of motion pictures, the Board also paid a portion of the cost of a film on the Federal Reserve System prepared by Encyclopædia Britannica Films Inc., and the Board's staff assisted in the technical review of the script.[53] This film, which is intended for college students, bank officials, senior employees of the System, and businessmen, presents an historical account of the development of objectives and authority of the System to influence the money supply, and uses animated sequences to illustrate the methods of affecting the volume of credit and money.

With the marked advances of recent years in techniques of visual education, notably in the armed services training schools, it seems likely that considerably more experimentation with motion pictures will be needed in order to make this medium most useful in the complex field of credit and money.

Expenses of certain informational material.—As has been stated, the work of providing materials for keeping the public informed is in large part a by-product of the regular staff work of supplying information and analyses needed for the formulation and administration of credit and monetary policies. Accordingly, it is impossible to allocate, in the aggregate or on a case-by-case basis, all costs of such material as motion pictures, illustrated brochures, and special material which are requested by the Subcommittee. For Board publications listed in Exhibit C (p. 330), there are shown the estimated expenses for printing and distribution; for Reserve Bank publications listed in Exhibit

[52] The Board of Governors paid a part, slightly less than $10,000, of the cost of the film.
[53] The contribution of the Board of Governors of approximately $18,000 assisted in defraying a portion of the initial out-of-pocket costs of the actual filming.

D (p. 334), the figures represent estimates of cost of compilation, printing, and distribution. Both exhibits include expenses for movies.

In these exhibits it seemed advisable to supply comprehensive information although it may not come within the purview of a question on expenses incurred "for the purpose of influencing public opinion on controversial matters." Credit and monetary matters are by nature controversial, however, and, broadly interpreted, even the most factual material may be said to influence public opinion. From these exhibits, the Subcommittee can judge for itself, if it so desires, the nature of System informational activities.

Promotion of savings bond program.—The Federal Reserve System voluntarily incurred expenses during the years 1946–50, which were not reimbursed by the Treasury, in promoting the Treasury's general program for selling savings bonds as an anti-inflationary measure. The amount for the Board of Governors for the period was $16,000, and for the Federal Reserve Banks, $73,000.

Exhibit B

Summary of Federal Reserve Bank Statements on Expenses Incurred for the Purpose of Influencing Public Opinion on Controversial Matters in Connection With Monetary and Credit Policy and in Connection With the Management of the Public Debt

The President of each Federal Reserve Bank was requested to comment for his Bank on the following part of Question E–27:

List and discuss any expenses which have been incurred since 1946 by the Board of Governors, or, to the Board's knowledge, have been incurred by the Federal Reserve Banks, for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and in connection with the management of the public debt. Expenses for the preparation of material in standard expository format and for the distribution or presentation of such material in written or oral form to persons who might be expected to have a regular business or professional interest in it may be omitted. * * * (This question is to be answered in collaboration with the Presidents of the Federal Reserve Banks.)

This exhibit presents excerpts from the statements made by the Presidents in response to this request.

Boston.— . . . we feel after consideration of question here that we would have no expenses to report since 1946 as having been incurred for the purpose of influencing public opinion on controversial matters. Our only public concern with what might sometimes be considered matters of controversy has been in connection with our program to render aid in the economic development of New England. Some parts of occasional speeches have dealt with factual reporting of businessmen's complaints on taxation or on recommendations for the building of new industrial plants and like subjects. On such occasions the matter has been a by-product of our regular operations and the expense to the Bank has been negligible.

We have believed that it was our function to assemble and analyze various data pertaining to the general economic structure of the First Federal Reserve district, and to present these data without bias. This policy has been followed in the printed publications of the Bank.

Members of the staff are called upon to speak at bankers meetings and other public or semi-public gatherings such as Chambers of Commerce, credit groups, trade associations, service clubs and technical associations. Most of these talks are "off the record" and rarely appear in the press, but even in these a general policy of objectivity is adhered to; that is, conclusions are stated only as they follow from the facts presented. When opinions are expressed they are stated as those of the individual rather than those of the Bank.

New York.— . . . we have accepted, and we have been guided by, the statement of the Conference of Chairmen, at its meeting in 1941, with regard to the functions of the Federal Reserve Banks and their broad general responsibilities in the field of public relations. Of special importance, we think, are the following parts of the statement:

"There should be no limit to the work of the Federal Reserve Banks in the field of cooperation, education, and leadership. The good that the Banks can do is limited only by the intelligence, courage, and leadership of their directors and officers . . . it seems desirable that the Reserve Banks be firmly established as centers of information, enlightenment, and leadership. They must be able to submit comprehensive information, wisely interpreted, on economic problems and regional trends. They must be able to act as centers for interpretation in their districts of national policy and methods in the fiscal and monetary area." The implementation of the principles expressed in this statement, except for the activities of our Research and Bank Relations Departments, was not put upon any formal organizational basis until 1949, however. In that year, prompted by a growing emphasis upon the subject of public relations within the System, and by the consciousness that there was a need to do so, we formulated, with our directors' approval, an affirmative program of public information envisaging (1) the improvement of methods in use, and the development of other methods, so as to help bring about a better understanding, on the part of those segments of the public concerned, of the objectives of the System and of the steps being taken to achieve those objectives; and (2) establishing a unit within our organization that would have fixed responsibility to plan and execute the program and to keep the President and the Directors informed of what was being done and planned. As a result, a small unit was established in the Secretary's Office at the beginning of 1950. This unit, which has since been enlarged somewhat, continues to carry out the duties assigned to it in the execution of the program, which involves, at various points between its center and its periphery, relations with other units of the Bank's organization, including the Research Department and the Bank Relations Department.

Some of our regular activities . . . may have had some incidental or indirect effect upon public opinion. For example:

(*a*) In our relations with the press, which mainly revolve about periodic meetings of press representatives with designated officers of the Bank, we endeavor to furnish, to the extent we regard appropriate, information on current developments within our field that will be of interest to bankers, businessmen, and the general public, as well as background material that will aid the newspapermen in interpreting those developments for their readers.

(*b*) At the request of bankers, civic organizations, educators and others, we furnish speakers from time to time to give informational talks upon current developments in fields of common interest, and upon general matters relating to the work of the System.

(*c*) As part of continuing programs, our representatives visit district bankers to discuss operational and other problems involved in our relations with them; to discuss, upon request, the question of membership in the System; and otherwise to help maintain a smooth working relationship with district banks and bankers. Our representatives also visit educators and "country" newspapers in the district to call attention to the existence of Federal Reserve publications which may be of interest or use to them.

(*d*) Guided tours of the Bank are given, upon request, to bankers, students and other interested groups. These tours provide a basis for some discussion of the nature and significance of our operations.

The expenses involved in activities of this sort, which are a by-product of the regular work of the Bank, are not segregated in our records, nor are they believed to be substantial.

Philadelphia.—We have held meetings with bankers and bank directors to analyze the role of the Federal Reserve System and to discuss current economic developments. We have also acceded to requests that a member of our staff address meetings of various organizations. Members of the staff also visit banks in the District. We have incurred expenses in the conduct of such activities, but the purpose has not been to influence public opinion on controversial matters.

Cleveland.—We have arranged meetings from time to time with bankers and bank directors, at the Federal Reserve Bank and its branches and at other points in the Fourth Federal Reserve District, for the purpose of discussing bank operations and the current situation in business and banking affairs. We have felt that we have an obligation to exchange ideas with bankers, giving them the benefit of the views of our officers and the work of our research department, and obtaining from them their views as to business and banking conditions in their communities. We have also cooperated with bankers' associations and State anniversaries in the District in meetings designed to promote the interests of agriculture. In many cases we have been host at a luncheon or dinner given in connection with meetings of both classes. These meetings have been for the purpose of exchange of ideas and information pertinent to banking or agricultural operations, and the expenses incurred have not been for the purpose of influencing public opinion on controversial matters. We have also organized or assisted in meetings held for the purpose of acquainting the business public with the provisions of newly issued laws or regulations such as those relative to control of consumer and installment credit and real estate loans.

Richmond.—As understanding makes for cooperation and consequent greater effectiveness of monetary and credit policy measures, it is considered not only appropriate but necessary that banking groups and other segments of our economy better understand the objectives of the System and the means employed to these ends. This broader understanding is one of the major objectives of our bank and public relations program. However, a careful review of our entire program does not disclose any activity or expense incurred since 1946 that was intended or that we feel could be considered as for the purpose of influencing public opinion on controversial matters.

Atlanta.—The Federal Reserve Bank of Atlanta has expended no money for the purpose of influencing public opinion on controversial matters. It has, however, expended funds during the period under review in support of public meetings where matters of agricultural, banking, and other economic interests were considered. The expenditures have predominantly been for the purpose of paying for luncheons or dinners provided for the people assembled at the meetings. Moreover, such expenditures have usually been made in cooperation with the various State banker associations of the six States making up the Sixth Federal Reserve District. These meetings have been primarily educational in nature and in no sense controversial. A number of dinner meetings have been held for the purpose of encouraging the purchase of savings bonds and to stimulate a better understanding of the use of banking facilities by the rural areas.

Chicago.—At no time has this Bank instituted any program or activity designed to influence public opinion on controversial matters. We endeavor to avoid public display of partiality toward one side of any controversy.

With due regard to this policy, we publish considerable material and members of our staff make speeches concerning our operations or relating to current economic conditions affecting this District. Our published material, information concerning which is submitted in the following section, is largely a presentation of the results of economic research by our economists. While frequently controversial subjects are covered in this economic analysis, the material is subjected to careful review to insure that it is impartial and in reportorial style.

Much less supervision is exercised over speeches, however, which are made almost entirely on a personal basis in response to requests from bankers and others who wish speakers for bankers' meetings and other public gatherings. Speakers select subjects suitable to the occasion and prepare their own material, which is very seldom placed in written form or furnished the press.

While the management of this Bank has not used this speaking program to further any views it may have on any controversial issues, it is realized, of course, that individual speakers, in the necessary coverage of important economic developments, frequently discuss many issues in a favorable or unfavorable light. The great bulk of our speeches are on subjects of monetary and fiscal policy, banking, finance, agriculture, labor, trade, and other industry, in all of which are found many debatable issues and upon which informed persons, such as our speakers, are expected to express opinions one way or the other. To the extent that these views are not presented as those of the Bank, and cause no undue publicity in this connection, the speakers are free to express their personal convictions on any subjects they discuss.

St. Louis.—The St. Louis Bank engages in a variety of activities to further public understanding of the economic role of the banking system and the Federal Reserve System. Such activities include participating in meetings, preparing and distributing materials, showing films, arranging for conducted tours through the Bank, and making speeches. It is our opinion that we have an obligation to promote better and more widespread understanding of the workings of the financial system and the reasons for and implications of the actions of the central bank. We believe that the public should be as thoroughly informed as possible concerning such matters. Without question public opinion is influenced as public understanding grows, and to this degree the activities noted influence public opinion. We do not believe that the subject matter handled is controversial unless "controversial matters" is to be interpreted so broadly as to be all-inclusive.

The real questions about such activities are whether the manner of carrying them on is primarily educational and whether the treatment is objective and designed to promote understanding. Our activities are designed to promote these broad educational purposes and not merely to rationalize existing practices or to perpetuate existing practices.

In addition to the above actions relating to fostering understanding about the financial system and its workings, we carry on certain activities designed to promote sound regional economic development. Again we aim mainly at more widespread understanding which results in some influencing of public opinion. There may be some controversy over particular alternatives or priorities with respect to fuller utilization of our resources, but there is little or no controversy over the desirability of fuller economic development. Our analyses and presentations of materials attempt to bring out objectively the problems and the possible alternatives for their solution.

Minneapolis.—We have never intended in any publication to influence public opinion on controversial matters. Our objective has been purely educational. Following this objective, we have disseminated educational material in an effort to inform the public on monetary and economic matters and the functions of a central bank.

Kansas City.—This Bank has not incurred expenses for the purpose of influencing public opinion on controversial matters. Economic developments pertaining to agriculture, business, and banking are discussed in publications of this Bank distributed among bankers and others, by speakers from this Bank's staff who appear before various groups, and in meetings sponsored by this Bank in cooperation with State bankers' associations. In this connection, consideration is given to monetary and credit problems and to the policies and credit actions of the Federal Reserve System. These activities are undertaken with a view to increasing public understanding; they are not engaged in for the purpose of influencing public opinion on controversial issues.

Dallas.—Through its publications, sponsored meetings, and contacts of officials with bankers, businessmen, and others in the District, this Bank presents educational material to various groups and individuals in the District. It is an objective of this Bank to promote a clearer understanding of central banking and monetary and credit problems among commercial bankers, businessmen, various other groups, and the general public in this District. Our objective is educational, not propagandistic. We realize, however, that education influences thinking and thinking influences opinions. Therefore, it is possible that some of the activities of this Bank may have influenced public opinion on such controversial matters as monetary and credit policy and the management of the public debt. No expenses have been incurred for purposes which would have the narrow and direct objective of shaping public opinion on such problems as specified in the question under discussion, although we would not disavow completely the possibility that some of our activities have influenced indirectly, as a result of an educative process, public thinking.

For example, this Bank published and distributed to a selected list of leading bankers, businessmen, and educators in the Eleventh Federal Reserve District "The Reply of R. R. Gilbert, President, Federal Reserve Bank of Dallas, to the Questionnaire Addressed to the Presidents of the Federal Reserve Banks by the Subcommittee of the Joint Committee on the Economic Report." The material contained in that publication was prepared by officers of this Bank at the request of Chairman Douglas of the Subcommittee, and any expenses involved in its preparation cannot, in our opinion, be construed as representing an undertaking by this Bank to influence public opinion on the subject matter of the report, inasmuch as the work was done and the expenses were incurred as a result of a request of a Congressional subcommittee. This Bank did, however, on its own initiative and as a part of its program of promoting a better understanding of monetary and central banking matters distribute copies to the above-mentioned groups.

In addition, it has been the practice of this Bank for many years to publish an annual report of the President of the Bank for distribution to the Bank's directors and an annual report to stockholders for distribution to the member bank stockholders. In 1951 (for the year 1950) these two reports were consolidated and distributed to the Bank's directors and stockholders and also to a limited list of businessmen and educators. Again, this report was distributed as a part of this Bank's program of promoting a better understanding of the operation of this Bank and of certain central banking problems. Its distribution was intended to be primarily for educative purposes, although it is possible that in the process of improving the readers' understanding of the subject matter contained in the report there might have been some influence on their thinking and on their opinions.

Also, from time to time, officials and economists of this Bank are called upon to address various public groups on current economic developments occasionally including credit policy. These addresses may stimulate thinking on the part of the listeners and may conceivably influence their opinions regarding the subject matter presented.

In none of the above cases, however, are the expenditures of this Bank made for the direct and sole purpose of shaping public opinion, but they might be construed as promoting a better understanding and more incisive thinking on some controversial problems and to that extent might contribute to the formulation of public opinion.

San Francisco.—It is necessary, if this Bank and the Reserve System are to take effective action in accordance with their statutory responsibilities, that System actions and policies be clearly understood by bankers and others concerned, on the one hand, and that the System be receptive to the comments and aware of the attitudes and reactions of those affected by its policies, on the other.

Consequently, through discussions with bankers and others, through speeches, through occasional meetings, and through our Monthly Review, we have attempted, by presenting material on as factual and objective a basis as possible, to increase public understanding of current business developments in general, and of developments in the area of money and credit in particular. When appropriate, related actions of this Bank and the Federal Reserve System have been reviewed in this connection.

In 1950 and 1951, this Bank held a Central Banking Seminar for qualified college and university teachers of money and banking in the Twelfth District. These seminars were an attempt to give participants an opportunity to see and discuss operations and policies of the Federal Reserve System, with particular reference to the operations of the Federal Reserve Banks of San Francisco and New York, and the Board of Governors. Sessions were kept on an objective level, and there was no attempt to indoctrinate or to influence the opinions of those participating. The 10 instructors attending each seminar were chosen by a committee of faculty members from representative Twelfth District colleges and universities; except to agree with the committee as to the general qualifications for eligibility and to request that applicants be selected with some regard for geographical distribution throughout the District, this Bank exercised no influence whatever in the choice of applicants.

Such activities have not been carried on for the purpose of influencing public opinion on controversial matters. Every effort is made to avoid a one-sided presentation of material, the subject of which might be considered controversial. At the same time, it is hoped that these activities have increased, to some degree at least, an understanding of the System's problems and functions. These activities, for the most part, have been undertaken in response to requests from bankers and others interested.

We believe there is a legitimate and valid distinction between an objective discussion of the factors that must be considered in reaching a conclusion and an attempt to "sell" a particular conclusion. Assuming that the latter procedure is what is meant by "influencing public opinion," we have made no expenditures "for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and in connection with the management of the public debt."

Exhibit C

Expenses Incurred by the Board of Governors of the Federal Reserve Ssytem for Duplication and Distribution of Regular Publications, Statements and Addresses, and Special Press Releases, and for Preparation of Movies, 1946–June 30, 1951

This exhibit includes material compiled by the Board of Governors for consideration by the Subcommittee in respect to that part of Question E–27 which reads as follows:

Any expenses during this period [since 1946] for the preparation of motion pictures, illustrated brochures, or any other special material in these fields should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the Subcommittee may, if it desires, consider them on a case-by-case basis.

This exhibit shows for individual items circulated in mimeographed, printed, or similar form the estimated cost of mimeographing, printing, or other manner of duplication and of the postage and other distribution expenses.

Since material made available by the Board to the public in this form is prepared by the staff largely as a by-product of its regular work in supplying the Board of Governors with information and analyses needed for carrying out its credit and monetary functions, it is not feasible to make an estimate of this part of the cost of publications.

Expenses incurred by the Board of Governors of the Federal Reserve System, 1946–June 30, 1951, for duplicating and distributing publications, addresses and statements, and special press releases (including expenses for the preparation of motion pictures, illustrated brochures, and other special materials)[1]

Description	1946	1947	1948	1949	1950	1951 (to June 30)
MOTION PICTURES						
Board's portion of cost of "The Federal Reserve and You" (shared with Federal Reserve Bank of Minneapolis)				$9,900		
Payment to Encyclopaedia Britannica Films, Inc., in connection with production of sound film on Federal Reserve System				17,000	$892	$150
PERIODICAL PUBLICATIONS						
Annual Report	$2,502	$4,052	$3,958	4,084	5,061	4,881
Historical Supplement to Federal Reserve Charts on Bank Credit, Money Rates, and Business (annual)				560	1,126	1,051
Federal Reserve Bulletin (monthly)	61,624	83,768	90,301	91,107	97,322	44,951
Federal Reserve Charts on Bank Credit, Money Rates, and Business (monthly)[2]	699	3,132	4,160	5,195	5,831	3,188
National Summary of Business Conditions (monthly, mimeographed)	176	204	157	71	78	40
Weekly Review of Periodicals	1,712	2,031	2,029	1,221	1,484	953
SPECIAL PUBLICATIONS						
Postwar Economic Studies	6,197	1,907	3,620	943	1,289	
Bretton Woods Bibliography	48					
Monetary and Banking Reform in Paraguay	1,366					
Retail Credit Survey	1,269	2,085	2,636	887	825	
The Federal Reserve System—Its Purposes and Functions		32,499		7,954		7,259
Federal Reserve Charts on Consumer Credit		78				
Banking Studies		4,180	3,874	3,372		
Savings Bond Promotion Booklet[3]		10,000	2,488			
Debits and Clearings Statistics, Their Background and Interpretation			244			

[1] Costs shown are estimated cost of mimeographing, printing, or other manner of duplication, and of postage and other distribution expenses. In the stub each item is listed under the year in which it first appeared. Only those items for which cost of duplicating and distribution amounted to $25 or more in one year of the perod are included.
[2] Annual until June 1947.

Expenses incurred by the Board of Governors of the Federal Reserve System, 1946–June 30, 1951, for duplicating and distributing publications, addresses and statements, and special press releases (including expenses for the preparation of motion pictures, illustrated brochures, and other special materials)—Continued

Description	1946	1947	1948	1949	1950	1951 (to June 30)
SPECIAL PUBLICATIONS—continued						
Federal Reserve Building Brochure (description and pictures)	-------	-------	$75	$59	-------	$105
Reply of the Chairman of the Board of Governors of the Federal Reserve System to the Questionnaire of the Subcommittee of the Joint Congressional Committee on the Economic Report	-------	-------	-------	4,794	-------	-------
Counterfeit Warning Cards [3]	-------	-------	-------	698	$1,350	544
A Statistical Study of Regulation V Loans	-------	-------	-------	-------	2,224	-------
REPRINTS						
1946:						
Balance Sheet of Agriculture	$36	-------	59	19	38	-------
The Balance of Payments of the United States	30	-------	-------	-------	-------	-------
Establishment of Bretton Woods Institutions	43	$16	-------	-------	-------	-------
Financial Developments of Business Corporations	81	95	69	81	43	-------
Monetary and Banking Reform in Guatemala	36	-------	-------	-------	-------	-------
Survey of Consumer Finances [4]	430	842	2,293	3,776	5,221	1,143
Section 10, Banking and Monetary Statistics	69	-------	69	63	-------	-------
The United Kingdom and Postwar International Trade; Anglo-American Trade and Financial Negotiations; British White Paper Published in Connection with Anglo-American Financial Agreement (3 articles)	847	-------	-------	-------	-------	-------
1947:						
Bretton Woods Agreements	-------	46	63	-------	-------	-------
Survey of Bank Loans to Industrial and Commercial Businesses	-------	390	138	-------	200	-------
History of Reserve Requirements for Banks in the United States	-------	25	24	21	-------	-------
International Transactions of the United States in the First Postwar Year	-------	56	-------	-------	-------	-------
Bank Loans to Farmers	-------	28	106	-------	-------	-------
New Guatemalan Bank Law	-------	50	-------	-------	-------	-------
The Par Collection System of the Federal Reserve Banks	-------	34	-------	-------	-------	23
Revision of Weekly Statistics for Member Banks in Leading Cities	-------	48	-------	-------	-------	-------
Values and Limitations of Consumer Financial Surveys for Economic Research	-------	26	16	20	-------	-------
Revision of National Income and Product Statistics	-------	18	44	-------	12	-------
Monetary Measures and Objectives	-------	18	29	-------	13	-------
1948:						
Banking Assets and the Money Supply since 1929	-------	-------	40	-------	-------	-------
Commercial and Industrial Loans at Member Banks, April 16–May 15, 1942	-------	-------	31	-------	-------	-------
Federal Reserve Chart Book as an Aid to Bank Management	-------	-------	49	-------	-------	-------
Historical Review of Objectives of Federal Reserve Policy	-------	-------	50	-------	-------	-------
Measurement of Production	-------	-------	41	-------	-------	-------
Philippine Central Bank Act	-------	-------	181	-------	-------	-------
Revised Index of Department Store Sales	-------	-------	28	-------	-------	-------
Sales Finance Company Operations in 1947	-------	-------	66	13	-------	-------
Steps to Restore Powers of States and Localities	-------	-------	27	-------	-------	-------
1949:						
Federal Reserve Index of Industrial Production	-------	-------	-------	218	-------	-------
New Statistics of Interest Rates on Business Loans	-------	-------	-------	39	-------	-------
Notes on Foreign Currency Adjustments	-------	-------	-------	29	-------	-------
Readjustment of Foreign Currency Values	-------	-------	-------	55	-------	-------
Recent Developments in Installment Credit	-------	-------	-------	41	-------	-------
1950:						
Defense Loan Policy	-------	-------	-------	-------	125	-------
Financing War Production and Contract Terminations under Regulation V	-------	-------	-------	-------	50	-------
Insurance of Commercial Bank Deposits	-------	-------	-------	-------	59	-------
Measurement of Consumer Credit	-------	-------	-------	-------	36	-------
Staff Study on Assessments and Coverage for Deposit Insurance	-------	-------	-------	-------	34	-------
Statement on Defense Production Act of 1950	-------	-------	-------	-------	91	-------

[3] Printed for Treasury Department.
[4] Entitled "A National Survey of Liquid Assets" in 1946.

Expenses incurred by the Board of Governors of the Federal Reserve System, 1946–June 30, 1951, for duplicating and distributing publications, addresses and statements, and special press releases (including expenses for the preparation of motion pictures, illustrated brochures, and other special materials)—Continued

Description	1946	1947	1948	1949	1950	1951 (to June 30)
REPRINTS—continued						
1951 (to June 30):						
The Treasury-Central Bank Relationship in Foreign Countries (Reprint of Appendix I to General Credit Control, Debt Management, and Economic Mobilization—Materials prepared for the Joint Committee on the Economic Report by Committee Staff)						$173
Program for Voluntary Credit Restraint (and amendments)						761
Voluntary Credit Restraint placards						2,483
Trends in International Trade Payments						31
ADDRESSES AND STATEMENTS						
1946:						
Chairman Eccles:						
The British Loan (mimeographed)	$26					
Governor Szymczak:						
Our Monetary Problems	64					
Our Foreign Lending Program (mimeographed)	53					
Outlook for Interest Rates (mimeographed)	72					
1947:						
Chairman Eccles:						
Postwar Bank Credit Problems		$41				
Statement on the Current Inflation Problem—Causes and Controls		444	$18	$10		
Statement before House Banking and Currency Committee, Dec. 8, 1947		738				
Governor Szymczak:						
Our Stake in German Economic Recovery		76				
American Economic Policy in Germany (mimeographed)		69				
Ruhr Coal, Germany, and Europe (mimeographed)		50				
Germany's Role in European Reconstruction		26				
Our Current Inflation and Monetary Problem		65				
Domestic Credit Problems and International Financial Policy		146				
1948:						
Chairman McCabe:						
Statement before Senate Banking and Currency Committee, July 29, 1948 (mimeographed)			34			
Statement before House Banking and Currency Committee, Aug. 2, 1948			453			
Significance of Membership in the Federal Reserve System			417			
Governor Eccles:						
Statement on Behalf of the Board of Governors of the Federal Reserve System before the Joint Committee on the Economic Report, Apr. 13, 1948			500			
Means of Combating Inflation:						
Statement before Senate Banking and Currency Committee, July 29–30, 1948			128			
Statement before House Banking and Currency Committee, Aug. 3, 1948			113			
Our Economic Dilemma (mimeographed)			33	4		
Governor Szymczak:						
Our Monetary and Credit Problems Today			279			
Our Present Financial Situation (mimeographed)			103			
Current Credit Problems (mimeographed)			80			
United States Financial Assistance to Foreign Countries (mimeographed)			74			
The European Recovery Program (mimeographed)			35			
What About Money and Credit?			342			
America's Role in the International Economic Situation (mimeographed)			56			
Our Present Economic Situation			36			
Financial Problems of European Recovery Program (mimeographed)			94			
Bank Reserves and Monetary Restraint (mimeographed)			26			

Expenses incurred by the Board of Governors of the Federal Reserve System, 1946–June 30, 1951, for duplicating and distributing publications, addresses and statements, and special press releases (including expenses for the preparation of motion pictures, illustrated brochures, and other special materials)—Continued

Description	1946	1947	1948	1949	1950	1951 (to June 30)
ADDRESSES AND STATEMENTS—continued						
1948—Continued						
Governor Szymczak—Continued						
Our Federal Reserve Policy Today (mimeographed)			$27			
Current Economic Situation			42			
Remarks before Conference of Illinois Bankers (mimeographed)			36			
Governor Evans:						
Regulation of Consumer Installment Credit			298			
1949:						
Chairman McCabe:						
Statement on Behalf of the Board of Governors of the Federal Reserve System before the Joint Committee on the Economic Report, Feb. 14, 1949				$579		
Testimony before Senate Banking and Currency Committee, May 11, 1949				387		
Equity Capital Situation (statement)				520		
Statement before the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report, Dec. 3, 1949				545		
Governor Eccles:						
Statement before Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report and Supplementary Letter to Senator Douglas, Nov. 22 and Dec. 1, 1949				449		
Governor Szymczak:						
The Credit Situation (mimeographed)				56		
Contemporary Monetary Policy and Economic Stability				94		
The Problem of Postwar Monetary Policy				74		
International Financial Problems of Our Economy (mimeographed)				68		
The Function of Bank Reserves				73		
Monetary Management at Home and Abroad				85		
What Does a Credit Man Think About Today?				71		
Governor Evans:						
Regulation W—Its Role in Economic Stability				32		
1950:						
Chairman McCabe:						
Statement on Behalf of the Board of Governors on S. 2822 (bill to amend FDIC Act)					$463	
Statement on Behalf of the Board of Governors on S. 2246 before Senate Committee (mimeographed)					72	
Statements—Proposed Legislation Regarding Bank Holding Companies before Senate Banking and Currency Committee, Mar. 1 and Mar. 17, 1950					1,461	
The Challenge of Opportunity Versus Security					410	
Statement on Proposed Small Business Legislation					508	
Our Common Problem					85	
Letter to all member banks					76	
Regulation of Consumer Credit					585	
The Role of Central Banking in Our Free Enterprise Society (mimeographed)					93	
Inflation and the Banking System (mimeographed)					29	
Governor Szymczak:						
Combined Speeches					346	
International Role of the Federal Reserve System					953	
Economic Stability and the Federal Reserve System (mimeographed)					92	
Government Finance and Our Public Responsibilities					120	
Monetary Policy in a Free Economy					548	
Monetary Policy Today					109	
Monetary Policy and the International Economy					449	
Money and Credit Today (mimeographed)					37	

Expenses incurred by the Board of Governors of the Federal Reserve System, 1946–June 30, 1951, for duplicating and distributing publications, addresses and statements, and special press releases (including expenses for the preparation of motion pictures, illustrated brochures, and other special materials)—Continued

Description	1946	1947	1948	1949	1950	1951 (to June 30)
ADDRESSES AND STATEMENTS—continued						
1950—Continued						
Governor Szymczak—Continued						
Anti-Inflation Battle Report					$145	
Philosophy of Current Monetary and Credit Policy					256	
Governor Evans:						
Consumer Credit Regulation in a Garrison Economy (mimeographed)					30	
1951 (to June 30):						
Chairman McCabe:						
Address—Role of Federal Reserve in Wartime (mimeographed)						$27
Letter to all banks—The Fight to Protect the Buying Power of the Dollar						90
Letter to all financing institutions in the United States regarding voluntary agreements and programs						82
Chairman Martin:						
Statement on taking office						90
Statement before House Banking and Currency Committee, May 10, 1951 (mimeographed)						96
Governor Eccles:						
Address before Executives' Club of Chicago (mimeographed)						27
Statement before Senate Banking and Currency Committee Considering RFC Legislation (mimeographed)						32
Statement before Joint Committee on the Economic Report, Jan. 25, 1951						88
Governor Szymczak:						
Speeches delivered in 1950						44
David L. Grove:						
Paper given at Third Stanford Conference on Latin America (mimeographed)						29
SPECIAL PRESS RELEASES						
Statement on Defense Production Act					71	
Recommended Decision in Matter of Transamerica Corporation						300
Establishment of Program for Voluntary Credit Restraint (mimeographed)						32

EXHIBIT D

EXPENES OF FEDERAL RESERVE BANKS FOR PREPARATION OF MOTION PICTURES, ILLUSTRATED BROCHURES, AND OTHER SPECIAL MATERIAL, 1946–JUNE 30, 1951

This exhibit includes material prepared by the Federal Reserve Banks for consideration by the Subcommittee in respect to that part of Question E–27 which reads as follows:

Any expenses during this period [since 1946] for the preparation of motion pictures, illustrated brochures, or any other special material in these fields should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the Subcommittee may, if it desires, consider them on a case-by-case basis. (This question is to be answered in collaboration with the Presidents of the Federal Reserve Banks.)

The expense figures shown for individual publication items include estimates of cost of compiling material, as well as those of printing and distributing the publication. Since the work of preparing publications is largely a by-product of the regular work of the staff of the Reserve Banks, the estimates of cost of compilation are very rough and represent judgments of this by-product cost which may vary from Bank to Bank.

Expenses of Federal Reserve Banks for preparation of motion pictures, illustrated brochures, and other special material, 1946–June 30, 1951

[Amounts shown are Reserve Bank estimates of total compilation, printing, and distribution costs]

	1946	1947	1948	1949	1950	1951 (to June 30)
Federal Reserve Bank of Boston:						
Motion picture prints relating to Federal Reserve operations					$1,134	
Monthly Review	$19,605	$25,316	$33,419	$37,496	38,345	$17,713
Agricultural News Letter	8,262	8,344	8,769	10,710	11,041	5,704
Digest, News Notes	2,850	3,185	3,600	4,000	4,900	2,795
Booklet, Proceedings of the Annual Meeting of Stockholders	860	809	769	807	929	
Booklet, Wooden Dollars [1]				11,634		
Booklet, Growth Trends in the New England Economy					1,646	
Folder, New England, Its Economic Importance and Prospects					2,899	
Radio scripts				655	635	422
Leaflet, The Federal Reserve Bank and You						144
Animated exhibit, Bankorama [2]			5,352	696		
Federal Reserve Bank of New York:						
Motion picture prints relating to Federal Reserve operations					668	496
Monthly Review	20,100	21,540	24,972	29,328	32,448	19,458
Annual Report	5,821	6,597	6,643	6,544	8,840	11,635
Newspaper reviews	3,250	3,250	9,000	9,250	9,500	8,177
National Summary of Business Conditions				303	2,724	1,602
Booklet, A Day's Work at the Federal Reserve Bank of New York						16,094
Booklet, Bank Reserves—Some Major Factors Affecting Them						2,775
Monograph, Banking Reform in South Korea						3,133
Directors' letters to member banks: report of stewardship					379	435
Federal Reserve Bank of Philadelphia:						
Motion picture prints relating to Federal Reserve operations		405			300	76
Monthly Review	12,107	14,315	15,263	18,398	19,105	9,873
Annual Report	1,542	1,724	2,024	1,849	1,800	2,510
Booklet, Proceedings of Federal Reserve Relations Committee	3,033	3,756	3,624	3,720	3,737	1,938
Pamphlet, The Quest for Stability					1,286	918
Pamphlet, Post-War Bank Lending in the Third Federal Reserve District		334				
Booklet, A Collection of Currency and Coins of the United States				56	950	695
Reprint of address, The Businessman's Stake in the Federal Reserve					171	
Leaflet, The Federal Reserve Bank and You					114	
Federal Reserve Bank of Cleveland:						
Motion picture, A Day at Federal Reserve Bank of Cleveland					11,608	
Motion picture prints relating to Federal Reserve operations						306
Monthly Review	14,702	16,628	20,585	18,722	20,097	11,335
Annual Report						13,249
Weekly statement, Business Trends				21,480	22,272	11,162
Press release, Weekly Summary of Cleveland Business Activity		603	1,037	1,228	1,554	901
Agricultural News Letter	899	1,141	766	790	784	381
Booklet, Bank Credit and Soil Conservation (reprint)	585					
Booklet, A Farm Loan Development Program for Country Banks	323					
Pamphlet, Profitable Farming			494	445		
Pamphlet, A Study of Farm Development Plans					336	
Statement, The Current Business and Financial Situation		241				
Thesis, Soil Conservation and the Banker		5,273				
Leaflet, A Day at Federal Reserve Bank of Cleveland					1,150	
Booklet, Bankers' Day at Federal					800	255
Leaflet, The Film Story of the Federal Reserve System						105

[1] A report on the forest resources of New England.
[2] Animation shows how circulation of money serves the New England economy.

Expenses of Federal Reserve Banks for preparation of motion pictures, illustrated brochures, and other special material, 1946–June 30, 1951—Continued

[Amounts shown are Reserve Bank estimates of total compilation, printing, and distribution costs]

	1946	1947	1948	1949	1950	1951 (to June 30)
Federal Reserve Bank of Richmond:						
Motion picture prints relating to Federal Reserve operations	-	-	-	-	$242	$2,257
Monthly Review	$11,077	$15,876	$19,568	$21,600	26,120	15,108
Annual Report	161	151	148	209	212	190
Agricultural News Letter	-	647	2,460	2,641	2,790	2,281
Pamphlet, Business Loans of Fifth District Member Banks	-	1,222	-	-	-	-
Pamphlet, Deposit Analysis as a Basis for Bank Investment and Loan Policies	337	-	-	-	-	-
Folder, Farm Credit File	-	2,616	267	9	235	241
Booklet, Farm Income in the Fifth Federal Reserve District	-	-	-	2,402	-	-
Study, Federal Taxing and Spending in Virginia	-	-	-	-	318	-
Report, A Financial Survey of Virginia Agriculture	-	-	-	696	-	-
Booklet, Here's the Story [3]	-	-	-	-	1,429	-
Catalog, Inventory of Economic Research Studies in the Fifth Federal Reserve District	-	-	-	-	1,097	-
Catalog, Inventory of Research Studies Related to the Virginia Economy	-	-	-	791	592	-
Monograph, Peanuts in the Fifth Federal Reserve District	8,503	-	-	-	-	-
Booklet, A Yardstick of Costs for Virginia Banks	-	-	-	-	-	538
Statistical and other material prepared for regional meetings	1,098	6,706	1,061	462	609	-
Radio scripts	-	-	-	43	269	11
Federal Reserve Bank of Atlanta:						
Motion picture prints relating to Federal Reserve operations	-	-	-	-	991	365
Motion picture, Farm Forestry (Film prepared by Mississippi State College)	-	-	-	1,000	-	-
Monthly Review	10,604	13,926	14,817	16,048	17,190	8,755
Annual Report	-	199	1,033	1,208	2,272	2,839
Agricultural News Letter	-	-	-	4,289	4,528	2,290
Newspaper Review	(4)	1,760	2,025	3,325	3,365	1,800
Federal Reserve Bank of Chicago:						
Motion picture prints relating to Federal Reserve operations	-	700	-	-	445	150
Monthly Review	26,471	29,802	32,820	35,246	36,957	19,832
Annual Report	1,170	1,080	2,580	6,200	6,470	7,330
Agricultural News Letter	2,824	2,849	3,276	3,518	3,603	1,886
Study, A Financial and Economic Survey of the Meat Packing Industry	5,144	1,247	1,231	-	-	-
Leaflet, The Farmer, the Banker and Farm Credit	-	195	1,665	-	-	308
Study, Employment, Production and Income in the Chicago Industrial Area	-	-	3,557	-	-	-
Booklet, The Book of the Bank	-	-	-	-	6,900	-
Leaflet, The Story of a Check and Its Journey Through Life	-	-	290	-	-	-
Television script, Salute to the Federal Reserve System	-	-	-	-	50	-
Leaflet, The Farm Real Estate Market and Agricultural Credit in the Seventh Federal Reserve District	1,527	1,528	1,557	1,353	1,439	93
Federal Reserve Bank of St. Louis:						
Motion picture prints relating to Federal Reserve operations	-	-	-	-	590	-
Monthly Review	15,320	17,365	20,940	22,197	23,076	11,933
Annual Report	-	119	135	143	1,057	1,678
Miscellaneous agricultural publications	5,966	3,424	3,886	4,225	3,582	-
Booklet, History of Coinage and Currency in the United States	-	-	-	-	1,410	-
Leaflet, The Federal Reserve Bank and You	-	-	-	-	78	-
Descriptive pamphlet on Federal Reserve System (Louisville Branch)	35	-	-	-	-	-
Federal Reserve Bank of Minneapolis:						
Motion picture, The Federal Reserve Bank and You	-	-	-	-	14,860	602
Motion picture prints relating to Federal Reserve operations	21	369	359	439	523	15
Monthly Review	5,632	6,851	8,471	9,547	10,164	5,135
Annual Report	624	906	3,383	1,819	2,310	-

[3] Case study of a farmer's use of borrowed money.
[4] Not available.

Expenses of Federal Reserve Banks for preparation of motion pictures, illustrated brochures, and other special material, 1946–June 30, 1951—Continued

[Amounts shown are Reserve Bank estimates of total compilation, printing, and distribution costs]

	1946	1947	1948	1949	1950	1951 (to June 30)
Federal Reserve Bank of Minneapolis—Con.						
News Review	$2,075	$2,257	$2,337	$2,491	$2,642	$1,628
Agricultural News Letter	1,716	2,125	2,693	3,051	3,485	1,811
Pamphlet, Timely Advice for Merchants of Money	-----	-----	379	-----	-----	-----
Pamphlet, Forum Views	-----	-----	-----	-----	579	-----
Pamphlet, The Ninth District's Stake in World Trade	-----	-----	-----	1,040	-----	-----
Pamphlet, Where Does Small Business Obtain Its Capital?	-----	-----	-----	1,682	-----	-----
Pamphlet, The Rising Tide of Bank Lending	-----	1,348	-----	-----	-----	-----
Pamphlet, The Future of Northwest Bank Deposits	999	-----	-----	-----	-----	-----
Pamphlet, The Road Ahead	-----	-----	-----	553	-----	-----
Pamphlet, Views on Money Management [5]	-----	-----	-----	-----	-----	580
Catalog, Library Books	-----	-----	1,925	-----	-----	-----
Leaflet, The Federal Reserve Bank and You	-----	-----	-----	-----	677	-----
Pamphlet, The Federal Reserve Bank and You—Teachers' Aid for Classroom Instruction	-----	-----	-----	-----	559	-----
Illustrated brochure, Your Money and the Federal Reserve System	63	120	89	211	632	555
Booklet, Presenting a Short Course in Central Banking	-----	-----	604	-----	-----	-----
Leaflet, Library Letter	934	1,081	1,208	1,318	1,339	452
Miscellaneous material prepared for conferences and forums	1,191	1,092	1,474	1,273	1,417	617
Pamphlet, Money and Banking Workshop	-----	-----	-----	-----	-----	176
Federal Reserve Bank of Kansas City:						
Monthly Review	8,598	9,398	10,797	11,518	12,132	6,059
Annual Report	-----	-----	-----	2,402	2,142	2,406
Booklet, The Changing Volume and Regional Distribution of Bank Deposits	1,228	-----	-----	-----	-----	-----
Booklet, The Outlook for Peanut Production in Oklahoma	1,585	-----	-----	-----	-----	-----
Special material prepared in connection with economic forums	-----	-----	2,066	2,152	-----	-----
Study, The Economy of Albuquerque, New Mexico	-----	-----	-----	7,143	-----	-----
Booklet, Soil Conservation	-----	-----	-----	7,191	-----	-----
Agricultural and Business Charts—1950	-----	-----	-----	-----	997	-----
Federal Reserve Bank of Dallas:						
Monthly Review	7,635	10,042	10,493	10,698	11,334	6,096
Annual Report	115	290	251	268	457	2,540
Agricultural News Letter	1,217	1,413	1,580	1,647	1,961	1,141
Booklets prepared in connection with bankers forums	6,252	13,805	1,935	6,582	4,943	2,552
Farm Clinic Booklet	-----	-----	-----	703	790	922
Annual Report on Bank and Public Relations	-----	-----	-----	-----	529	1,285
Booklet, Economic and Banking Trends in Texas	-----	-----	323	-----	-----	-----
Radio scripts	64	286	251	219	252	169
Reply to questionnaire of the Subcommittee of the Joint Committee on the Economic Report	-----	-----	-----	722	-----	-----
Leaflet, Economic Bulletin	-----	-----	-----	152	148	-----
Statement, Financial News of the Week	-----	-----	-----	-----	-----	148
Statement, Agricultural News of the Week	-----	-----	-----	-----	1,393	873
Federal Reserve Bank of San Francisco:						
Motion picture prints relating to Federal Reserve operations	-----	-----	-----	-----	625	940
Monthly Review	6,625	12,250	15,600	20,500	[6] 36,235	[7] 15,215
Annual Report	210	255	230	245	245	255
Pamphlet, Seattle Branch, Federal Reserve Bank of San Francisco [8]	-----	-----	-----	-----	-----	2,200
Pamphlet, Portland Branch, Federal Reserve Bank of San Francisco [8]	-----	-----	-----	-----	-----	1,300
Reprint, A Milestone in Washington State Federal Reserve Banking	-----	-----	-----	-----	-----	42
Leaflet, The Federal Reserve Bank and You	-----	-----	-----	-----	86	-----
Leaflet, The Federal Reserve System (Origin, Purposes, and Functions)	-----	-----	-----	-----	-----	85

[5] Addresses at Federal Reserve Conference, Apr. 21, 1951.

[6] Includes $11,635 incident to the following publications issued as supplements to the Monthly Review: The Sheep Industry of the Twelfth Federal Reserve District; Problems of Trade Recovery in Japan; Western Power and Fuel Outlook; and The Lumber Industry of the Pacific Coast.

[7] Includes $6,665 incident to the following publications issued as supplements to the Monthly Review: The Sugar Beet Industry in the Twelfth Federal Reserve District; and Waterborne Trade of California Ports.

[8] Prepared in connection with opening of new Branch building.

F. General Credit and Monetary Policy

28. Discuss the factors that determine the quantity of money and its adequacy for the functioning of the economy. Cover the influence of Federal Reserve credit policies over changes in the quantity of money.

In this discussion, money is defined to mean both demand and time deposits as well as currency and coins. Demand deposits, currency, and coins are all transferred freely in the making of payments. Time deposits, while immediately a store of value which is not directly transferable, are considered by the public as part of cash assets and are readily convertible at par into other forms of money. At the present time bank deposits are by far the most important form of money. Paper currency and coins form only a small part of the money supply.

Under the monetary system in this country the supply of money is responsive in the main to the needs of commerce, industry, agriculture, and government, to the trend of the country's international financial transactions, and to the desire of businesses and individuals to hold cash balances. The principal source of new money is credit extended by the banking system. Bank loans to finance production and trade or for other purposes, or bank investments in corporate or government securities supply money which the recipients may use for payments or may themselves hold in the form of bank deposits or currency. While individual recipients may quickly pass the money on to others in making expenditures, the money continues in existence until it is used by someone to repay a bank loan or to buy securities from a bank.

Factors responsible for changes in the total money supply may affect either bank deposits or currency. The forms in which the aggregate money supply is held reflect the preferences and conveniences of individuals and businesses; and although they affect materially the structure and operations of our financial institutions, they do not ordinarily have great significance from the standpoint of the adequacy of the over-all supply of money.

Factors affecting the supply of money

In general, the most important determinant of the aggregate supply of money is the lending and investing activity of commercial banks, which itself reflects the current demand for credit by private and public borrowers, the public's desire to hold cash balances, the available supply of bank reserves, and attitude of banks toward lending and investing.

Bank lending and the money supply.—When a commercial bank makes a loan, it generally gives the borrower a deposit with itself—a deposit which, if the loan adds to the grand total of bank credit outstanding, was not previously in existence. The borrower may write a check upon the deposit, which may in turn be deposited in another bank. In this case, the first bank loses both deposits and cash resources, but these remain in existence in another bank. The same thing happens when a bank purchases an investment security from a nonbank investor. It makes a payment which ordinarily results in increased deposits in some bank within the banking system. Conversely,

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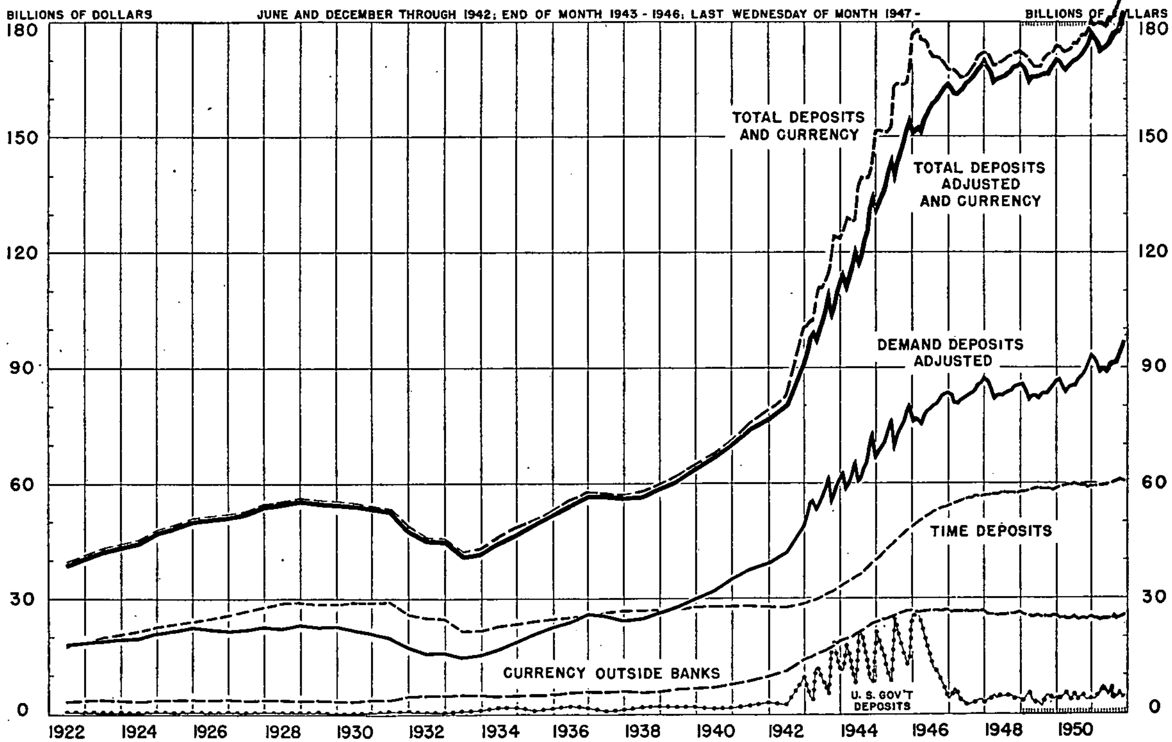
Note to Chart 4.—Demand deposits adjusted exclude interbank and U. S. Government deposits and cash items in process of collection. Time deposits include those in Postal Savings System, mutual savings banks, and commercial banks.

CHART 4

DEPOSITS AND CURRENCY

ALL BANKS IN THE UNITED STATES



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

when a borrower repays a loan, his deposit is reduced, without an equivalent increase elsewhere; and the money supply is reduced by that amount. Likewise, when a nonbank investor buys a security from a bank, he normally makes payment by drawing down his bank deposit, which then ceases to exist as a part of the money supply.

The influence of bank reserves.—The amount of loans and investments which commercial banks can make depends only in part on the demand for credit and the judgment by bankers of the creditworthiness of borrowers. It depends also upon the reserve position of the banks. Under our fractional-reserve system, banks are required to hold reserves equal to some percentage of their deposit liabilities. Member banks of the Federal Reserve System are required to hold their legal reserves in the form of deposits with the Federal Reserve Banks. At the present time, the reserves required behind demand deposits of member banks range from 14 to 24 percent, depending on the class of bank, and those behind time deposits are 6 percent. Reserve requirements of nonmember banks vary by States; they are shown in the reply to Question F-44.

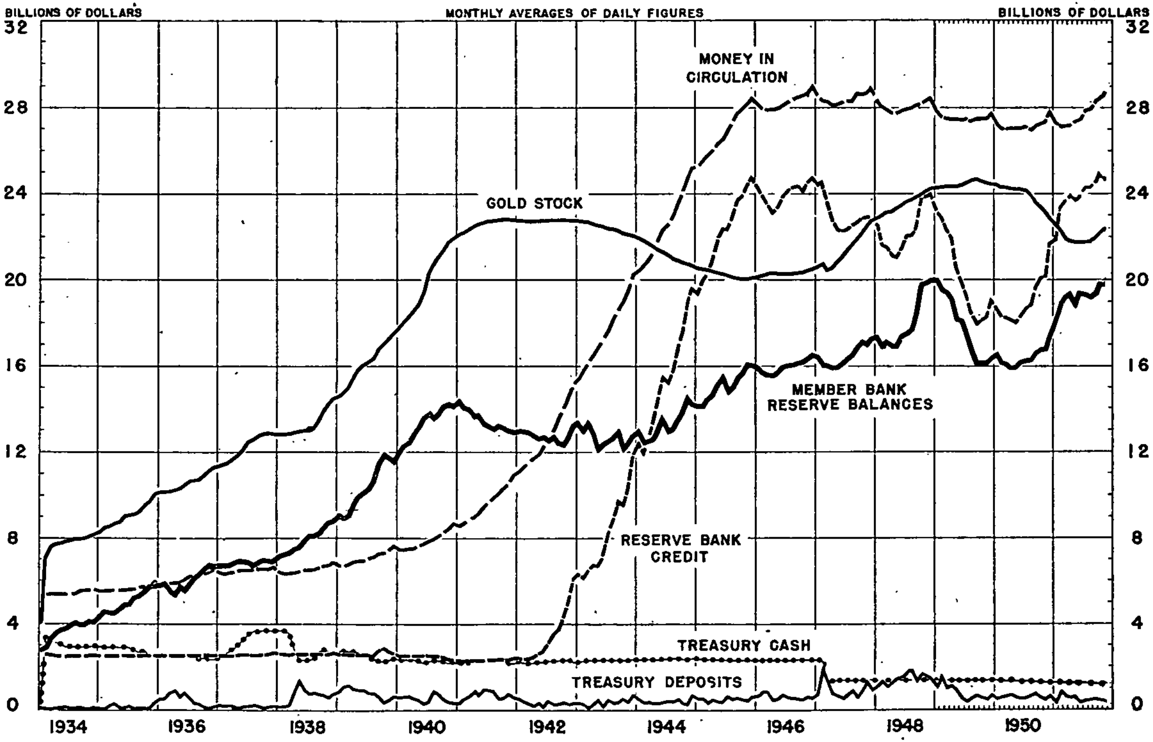
Since total reserve requirements of member banks actually average about 16 percent, member bank deposits can expand (assuming adequate demand for bank credit) by about six times the amount of any increase in bank reserves; that is, deposit liabilities of the banking system can rise by about $600 for every $100 addition to reserves held. If reserve requirements were 10 percent, then deposit liabilities could increase by about $1,000 for $100 addition to reserves. Thus the response that banks can make to the aggregate demands for credit is influenced by their reserve position, which in turn depends upon both the reserves available and the reserve requirement percentages.

The amount of reserves that banks have is affected by various domestic and international factors. The most important among domestic factors are changes in the volume of Federal Reserve Bank credit outstanding. The Reserve Banks can supply additional reserves by making advances to banks or by buying bills or securities in the market and can absorb reserves by reversing these operations. Increases and decreases in the amount of currency held by the public may also respectively exert a drain on bank reserves or add to them. Changes in Treasury deposits with the Federal Reserve Banks, or in cash held by the Treasury in its own vaults, and also changes in the amount of currency issued by the Treasury, may also affect the volume of bank reserves, but these are either relatively small or of a temporary nature.

The most important among the international factors is the movement of gold, which links the monetary system of the United States with the monetary systems of other countries. In our monetary system gold has a dual function. The United States is on a gold standard internationally, in that gold and dollars are freely interchangeable (at a fixed ratio at $35 per ounce of gold) in settlement of transactions between monetary authorities. Domestically, practically all of our gold stock serves as a basis for the reserves of the Federal Reserve Banks, which are required to hold gold certificates, amounting to at least 25 percent, against Federal Reserve notes and deposit liabilities. These deposits with the Federal Reserve Banks in turn provide the basis for the reserves of the commercial banking system. Thus, movements of gold arising from our surpluses or deficits in international accounts add to or reduce our gold stock and hence our monetary

CHART 5

MEMBER BANK RESERVES AND RELATED ITEMS



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

reserves. These reserves in effect place a ceiling on the volume of Federal Reserve credit that can be extended without penalty, and thus might tend to limit the amount of money which the Federal Reserve can provide. In practice, however, the reserve ratios have generally not been a limiting factor and Federal Reserve policies have generally been determined on the basis of the needs of the economy rather than on Reserve Bank gold reserve ratios. More immediately, an inflow of gold results directly in additional deposits and bank reserves, while an outflow of gold contracts deposits and bank reserves.

If the amount of bank reserves is increased, then the banks will be in a position to expand credit and deposits by a multiple of that amount. If, on the other hand, the amount of reserves is decreased, banks will be under pressure to contract credit and deposits.

It is important to note that a single bank does not create deposit money on a multiple basis of reserves. Each bank lends only what it has in excess reserves or excess cash assets. It is limited in this respect because the borrower will typically transfer the deposit to another depositor in another bank. A bank's new loans thus tend to increase the calls on it for cash, and thereby to reduce its cash resources. But since the deposits and the reserves do not leave the banking system but are merely transferred from bank to bank, the banking system as a whole can and does expand money by a multiple of its reserves.

Adequacy of the money supply

The amount of money in the economy is related in large part to the demand of the public for loans and the willingness of banks to satisfy this demand. From this point of view the money supply is responsive to the changes in economic activity, and the volume of money at any one time is a reflection of thousands of individual decisions made by business and individual borrowers and by many banks. In responding to the increased demand for loans as the economy expands, the banking system supplies the money needed by a growing economy. To the extent that the Federal Reserve System is in a position to affect the availability of reserves, the volume of money may also reflect the views of the System, based on its appraisal of the total credit and business situation, as to the extent to which credit should be tightened or eased at any given time in order to contribute to economic stability and economic progress.

Criteria for "enough" money.—There is enough money when the quantity is sufficient to support the volume of spending necessary to support a high level of production and employment, without leading to spending at a rate which would outstrip the supply of available goods and services at prevailing prices and result in an inflationary rise in prices. As noted, an economy which is expanding tends to require a gradually increasing money supply.

Ideally, the amount of money should adjust itself to the periodic waves of pressure for increased or decreased holdings of money on the part of the public. For example, at times businesses and consumers may increase their expenditures by using existing cash balances more intensively (what economists call "increasing outlays relative to cash balances" or "increasing the velocity of circulation of money"). If this happens when productive resources are fully utilized and prices are tending to rise, it is desirable that pressure be exerted to restrain so far as possible further expansion in the amount of money in the economy. Conversely, if heightened uncertainty should cause businesses and consumers to demand higher cash balances in relation to their expenditures, the demand should be met with an increasing supply of money rather than allowed to have its reflection in decreased spending and economic activity and in unemployment. While adaptations in the supply of money alone cannot guarantee against depressions or excessive booms, the lack of such adaptations can facilitate cumulative developments which might lead to more extreme movements than would otherwise occur.

In wartime, special monetary requirements arise as over-all economic activity accelerates and as the costly transition is made to producing armament, with resultant dislocations for consumers and businesses. It is of critical importance, however, that the wartime expansion in the money supply be kept as small as these requirements permit. In general, government deficits should be kept to a minimum and financed as much as possible through savings rather than through bank credit and monetary expansion. Excessive monetary creation in wartime will hamper the functioning of wartime economic controls and leave a legacy of inflationary pressures in the postwar period.

Tendency for excessive changes in money volume over course of business cycle.—Public demand for loans and bank judgments of the creditworthiness of borrowers alone cannot be depended upon to bring about appropriate changes in the quantity of money over the course of a business cycle. Indeed, if these factors alone were relied upon, changes in the quantity of money would tend to be excessive, first expanding and then contracting unduly. When there is an increase in the demand for goods and prices are rising, the demand for loans on the part of both businesses and consumers is likely to increase. At the same time, bankers' judgments of creditworthiness are likely to become more optimistic. If the resulting expansion in the supply and use of money exceeds the increase in the supply of goods and services of which the economy is capable at the time, then higher prices result. Rising prices lead in succession to increased demand for loans, more optimistic credit ratings, creation of more money, and so forth.

Conversely, when there is a decline in the demand for goods and in employment, the demand for loans on the part of creditworthy borrowers is likely to decline and at the same time banks are likely to become more pessimistic regarding credit ratings. The resulting decrease in the quantity of money may contribute to a further decline in demand, employment, and income, which in turn would result in still further contraction.

Moderation of changes in money supply through measures taken by the monetary authorities.—In order to moderate excessive swings in the volume of money, modern nations have all set up some form of centralized mechanism, usually described as a central or a reserve bank, to provide additional funds for credit expansion when needed to support full utilization of resources and also to help check excessive credit expansion in inflationary periods. Because of the dependence of bank lending capacity on the reserve position of banks, lending activities of banks can be affected by influencing their reserve positions. Reserve positions can be eased when depression threatens and the decline in the money supply should be retarded; they can be tightened when inflation threatens and there needs to be a check on the expansion of credit and money. In the United States the Federal Reserve System, by its operations, can act to offset the effects of gold and currency movements when such movements would tend to result in undesirable expansion or contraction of the money supply. It can also act to bring about a change in the amount of reserves when other factors, such as changes in the turnover of existing deposits or in the willingness of banks to hold excess reserves, make a change in the reserve position desirable.

One means by which the Reserve System may influence the bank reserve positions is through its handling of the discount mechanism by which it lends to member banks. When member banks as a group are obliged to borrow to maintain their reserves, banks tend to be more restrained in credit operations than when reserves are otherwise available. As bank borrowing tends to increase, the strength of this restraint multiplies. The Federal Reserve may reinforce bank reluctance to expand the volume of reserves through borrowing by raising the discount rate; by lowering the rate the System may lessen somewhat the reluctance of banks to borrow when it is necessary to make adjustments in reserve positions.

Another and closely related way the Federal Reserve can expand or contract bank reserves is through open market operations in commercial bills or United States Government securities. Actually, the Reserve System does this largely through operations in Government securities. If the Federal Reserve System purchases Government securities in the market, it pays for them with checks upon the Reserve Banks and thereby increases the reserves held by commercial banks with the Reserve Banks. This is true whether the sellers of securities are banks or nonbank investors. In either case the banking system is supplied with the reserve basis for multiple deposit expansion. Contrariwise, when the Federal Reserve System sells securities, bank reserves are reduced, whether the purchasers are banks or nonbank investors. Unless the banking system has been operating with excess reserves, available reserves will no longer meet the legal requirements and the commercial banks will be obliged to replenish reserves by borrowing reserves temporarily from the Reserve Banks. Ultimately there will be pressure for credit contraction and a reduction in the supply of money.

The Federal Reserve can affect the reserve position of banks not only by influencing the amount of reserves which they hold but also by altering, within limits set by statute, the percentage of deposits that banks are required to hold in reserves. If reserve requirements average 16 percent, deposits can equal $600 for every $100 of reserves. If reserve requirements are lowered, say to an average of 12 percent, reserves are freed and the stage is set for a process of multiple deposit expansion. If reserve requirements are raised and there are no excess reserves, new reserves must be acquired or deposits must be reduced until the available reserves meet the requirements. At the present time, the potentialities of Federal Reserve action through changes in reserve requirements are almost altogether in one direction only, for reserve requirements are already at the legal maximum for all member banks except for a relatively small leeway in authority over requirements for central reserve city banks.

The relation between Federal Reserve System action and deposit expansion or deposit contraction is, of course, not nearly so precise as the preceding overly simplified discussion would indicate. Banks may respond to Federal Reserve action by building up or drawing down excess reserves. However, if their excess reserves are increased and if further additions to reserves are readily obtainable, banks will be somewhat more willing to lend because of their increased liquidity; if their excess reserves are decreased and if new reserves are hard to get, banks will be somewhat less willing to lend because of their decreased liquidity. Banks may respond to increased reserve requirements or to open market sales by the Reserve System by borrowing from the Reserve Banks, but banks regard this as a temporary expedient. Moreover, the Reserve Banks can raise the discount rate which they charge commercial banks in order to restrain borrowing and in aggravated individual bank cases may discourage borrowing by direct means.

Federal Reserve transactions in Government securities with nonbank investors have a direct effect on the volume of money (as well as on the volume of bank reserves) which is independent of action by commercial banks. Purchases by the System from nonbank investors increase the money supplied by an equivalent amount; sales decrease it. Even without a response by banks, therefore, the System is able to operate directly to change the quantity of money. The *multiple* effect of such open market transactions on the money supply, however, depends on their effect on bank reserves and the response of bank lending policies to increases or decreases in the volume of reserves.

The effects of various measures of monetary policy are closely interrelated. For instance, an increase in reserve requirements may induce banks to borrow from the Federal Reserve, and a simultaneous increase in the discount rate might be needed to make such borrowing unattractive. Or, the increase in reserve requirements may induce banks to sell Government securities in the open market, and open market operations might simultaneously be needed to keep the resulting changes in the prices of Government securities from endangering orderly market procedures without at the same time depriving the increase in reserve requirements of its intended effect.

Changes in Federal Reserve discount and open market policies, moreover, by influencing expectations of financial institutions, businesses, and consumers, can increase or reduce desires to hold cash. At the same time these actions affect capital values and thus increase or reduce liquidity positions of major sectors of the economy, including banks and other lenders. In particular, during periods of inflationary pressures, heightened uncertainty as to future credit and monetary developments, such as would increase the liquidity requirements of the economy, can dampen the willingness of lenders to lend, borrowers to borrow, and holders of cash balances to spend. Conversely, in periods of deflation, action to stimulate confidence as to future credit and monetary ease will help ease the strain on liquidity positions and promote more active use of money.

Summary and conclusion

In summary, money is created when banks make loans or purchase investment securities. Money is extinguished when bank loans are repaid or when securities are sold by banks. Thus the amount of money in a modern economy depends principally upon the demand for credit and the willingness and ability of banks to grant loans and to acquire securities. Also, a surplus in our international accounts, if financed through importation of gold, would result in an expansion of the money supply, while a deficit would conversely give rise to export of gold and contraction of the money supply. However, developments in the demand of the public for credit and the banks' response to this demand, and changes in the country's international position may not by themselves result in an appropriate amount of bank credit and money. The reserve banking authorities, who may influence bank lending and investing by increasing or decreasing the volume, availability, and cost of bank reserves, have the responsibility to do so in a manner which will promote such changes in the money supply as may be needed to support a high level of production and employment without an excessive monetary expansion which might result in an inflationary rise in prices or other unstabilizing consequences.

29. Discuss the fundamental issues between the Treasury and the Federal Reserve System between the end of the war and the "accord" announced by these agencies on March 4, 1951. Describe fully the "accord" between the Treasury and the Federal Reserve System which was announced then.

The fundamental problem which both the Treasury and the Federal Reserve faced in the postwar period developed out of the serious issue created by the existence of a huge public debt in a period of growing private demands for goods and services. Liquidation of Government securities on the part of holders was an important source of funds for current spending and for credit expansion. In order to give some assurance to investors that their securities would not be subject to severe declines in prices and encourage the holding of such securities and to aid Treasury refunding operations, the Federal Reserve followed a policy of supporting the market for Government securities. In view of the recurrent heavy demands for funds during the period, these purchases had the effect of monetizing substantial amounts of Government securities, creating bank reserves, and laying the basis for excessive credit expansion. Changes in the various types of Government securities outstanding and in ownership of Government securities by principal investor groups are shown in Charts 6 and 7.

Both the Federal Reserve and the Treasury recognized the dilemma presented by the conflicting problems of debt management and credit restraint in the inflationary situation which developed. Various measures were adopted through credit, fiscal, and debt management policies in an endeavor to restrict credit and monetary expansion, to retire debt, especially that held by banks, and to attract the investment of savings into Government securities, while at the same time maintaining stability in the Government securities market. In general it may be said that both the Treasury and the Federal Reserve were in agreement as to the main objectives, i. e., the maintenance of a broad and healthy market for Treasury securities and restraint of further inflationary expansion of bank credit. The differences that arose reflected differences in judgment as to evaluation of the two objectives and as to the effectiveness and consequences of measures that might be taken.

Relationships between the Treasury and the Federal Reserve, until the latter part of 1949, were discussed in the statement submitted in November 1949 by the then Chairman of the Board of Governors of the Federal Reserve System in response to questions propounded by

CHART 6

GROSS DEBT OF THE U. S. GOVERNMENT

TREASURY DEPARTMENT DATA

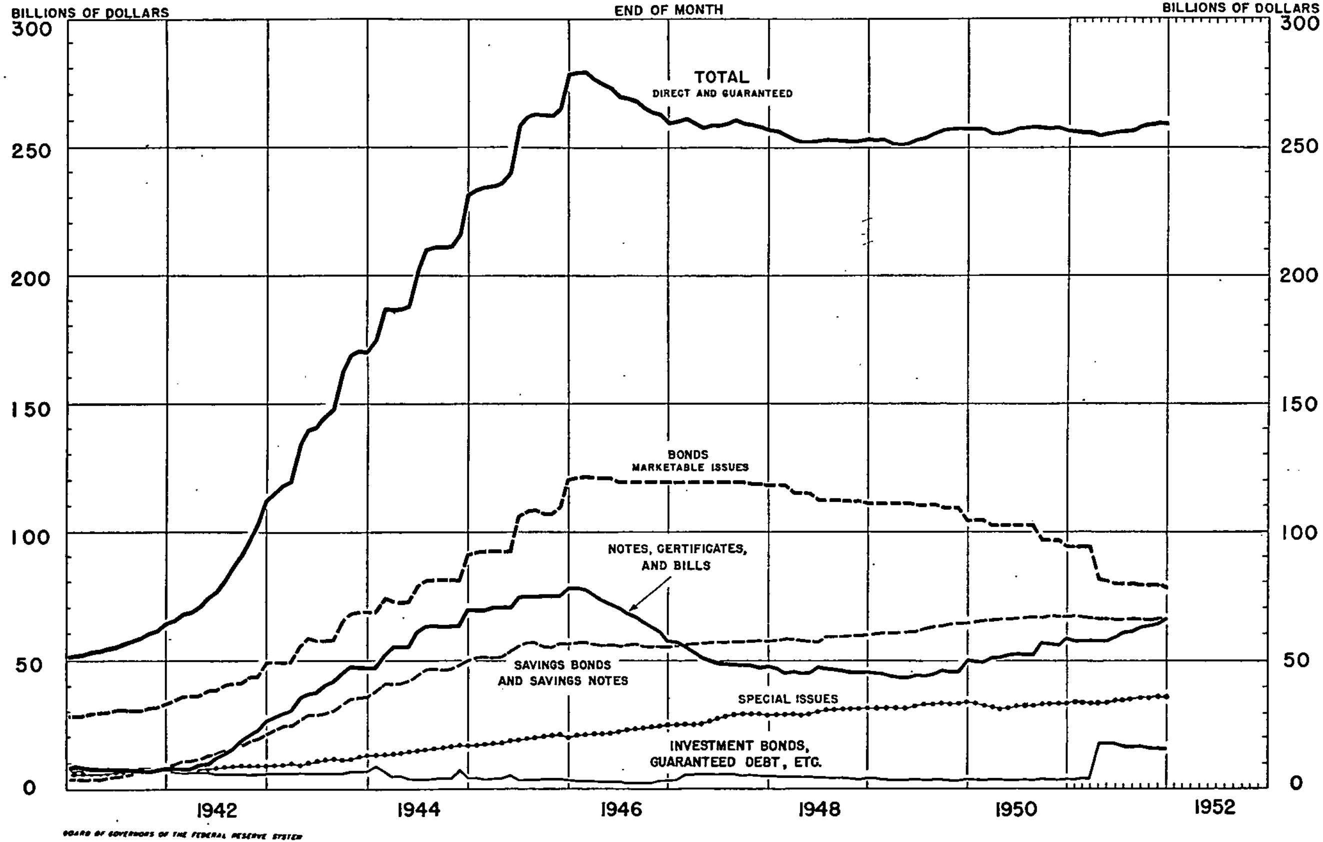
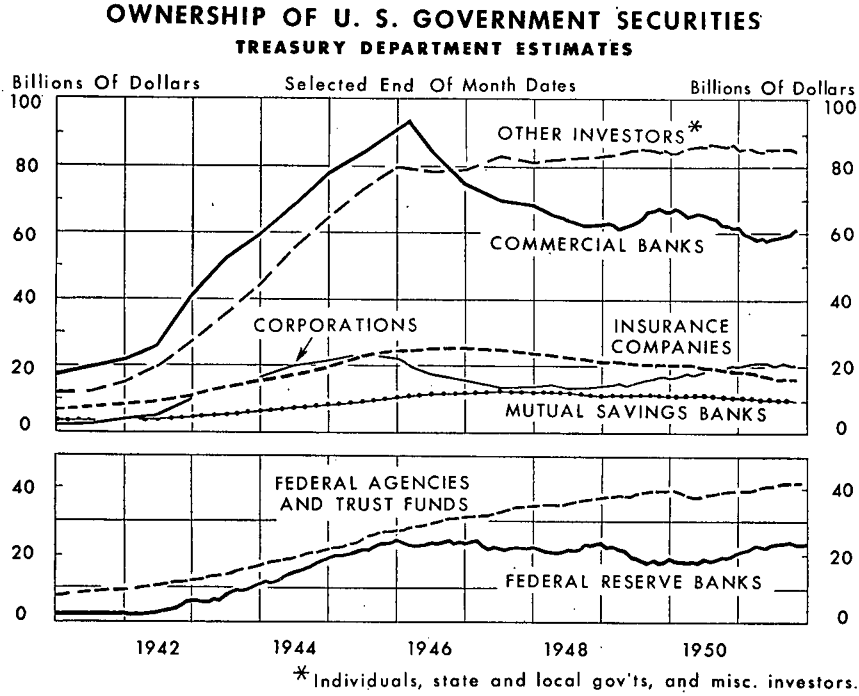


CHART 7



the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report. These answers may be found in the Joint Committee Print of the statement submitted, and the part dealing with the postwar period (pages 29–42) is included as Exhibit E to this reply. Developments with respect to Federal Reserve policies from the last few weeks of 1949 through the early weeks of 1951 were described in the Annual Report of the Board of Governors for 1950. Relevant excerpts are attached as Exhibit F to this answer.

The interrelated problems of exercising credit and monetary restraint, of endeavoring to maintain stable markets for Government securities, and of debt management became most acute with the recurrence of inflationary pressures following the outbreak of hostilities in Korea. There developed a growing volume of sales of Government securities by holders wishing to obtain funds to extend other credits. This selling later was augmented by sales, particularly of long-term bonds, on the part of some holders influenced by uncertainties as to the future of prices of the securities and by others wishing to protect themselves against declines in the purchasing power of money resulting from rising commodity prices. Large-scale purchases of securities by the Federal Reserve to maintain a stable market resulted in monetization of the public debt and creation of bank reserves, which in turn helped to finance the inflation. Confidence in Government securities, as well as in the value of the dollar, was in danger of being impaired, and this fear was augmented by public discussion of disagreement between the Treasury and the Federal Reserve.

Further explanation and appraisal of Federal Reserve policies and credit developments from August 1950 to February 1951 is given in the answer to the next Question (F–30). The remainder of this answer describes the nature of the accord between the Treasury and the Federal Reserve announced on March 3, 1951. It was prepared in collaboration with the Secretary of the Treasury and is identical to that submitted to the Subcommittee by the Secretary in reply to a similar question asked of him.

Throughout the period from August 1950 to February 1951, there were frequent consultations between Federal Reserve and Treasury officials, and on some occasions with the President, concerning the coordination of monetary and debt management policies. These discussions preceded the working out of the accord between the Treasury and the Federal Reserve concerning policies that deal with their related problems.

The following joint announcement was made on March 3, 1951, for publication March 4, by the Secretary of the Treasury and the Chairman of the Board of Governors and of the Federal Open Market Committee of the Federal Reserve System:

> The Treasury and the Federal Reserve System have reached full accord with respect to debt-management and monetary policies to be pursued in furthering their common purpose to assure the successful financing of the Government's requirements and, at the same time, to minimize monetization of the public debt.

This statement reflected agreements that had been reached, following extended discussion between representatives of the two agencies, regarding their mutual and related problems. The presumed area of difference had become greatly magnified in the newspaper and other public discussion and there was urgent need to reassure the public that the Treasury and the Federal Reserve were in agreement as to proper debt-management and monetary policies in the situation then existing.

The Treasury and Federal Reserve felt that everything possible should be done to terminate the unwholesome situation that had developed and to coordinate the debt management responsibility of the Treasury with the Federal Reserve responsibility for restraining credit expansion. It was the immediate object of the Treasury to restore conditions in the market that would be favorable to refinancing the large volume of maturing obligations, as well as financing several billions of new money required during the remainder of the year. It was the immediate object of the Federal Reserve to endeavor to curb the unprecedented inflationary loan expansion that had continued uninterruptedly since Korea by minimizing the monetization of the public debt and by making it necessary for member banks to borrow from the Federal Reserve in order to obtain additional reserves. With these basic objectives in view, representatives of the fiscal and technical staffs of the Treasury and the Federal Reserve had been designated to engage in a series of discussions and to formulate a proposal which might serve as a basis for policy decision.

The discussions between the Treasury and the Federal Reserve had made it clear that there were many areas of agreement between the Federal Reserve and the Treasury with respect to the solution of these problems; that the cooperation between the Treasury and the Federal Reserve had been of exceptionally high order on most matters of mutual concern; that there are bound to be differences of opinion now and then between agencies, as there are between individuals in the same agencies; but that such differences could be diminished by closer, regularized liaison with respect to mutual problems. It was agreed that there were both immediate and long-run factors which had to be taken into account in arriving at an accord, and that the purpose of the negotiation was to reach agreement upon policies that would reduce to a minimum the monetization of the public debt without creating an adverse market psychology with reference to Government securities.

First, consideration was given to the matter of long-term bonds overhanging the market and at the time being offered for sale daily in large amounts. It was agreed that a substantial portion of these bonds could be taken off the market by a Treasury offer to exchange for them a nonmarketable 2¾ percent, 29-year bond, redeemable at the holder's option before maturity only by conversion into a 5-year marketable Treasury note. The purpose of offering this new security, as announced by the Treasury, was to encourage long-term investors to retain their holdings of Government securities, in order to minimize the monetization of the public debt through liquidation of outstanding holdings of the Treasury bonds of 1967–72. The Federal Reserve agreed to help the Treasury in explaining to large institutional investors the nature and purpose of this new issue. The extent of the acceptance of the offering testified to the success of this joint endeavor.

Second, there was the problem of the long-term Government securities which private holders might try to sell on the market after the terms of the exchange offering became public. It was agreed that a limited volume of open market purchases would be made after the exchange offering was announced; and that if sales on the market were excessive, the situation would be assessed daily, the market would be kept orderly, and open market purchases, if any, would be made on a scale-down of prices.

Third, the difficult problems posed by pending task of refunding the large volume of short-term securities maturing or callable in the near future presented difficult problems both for the Treasury and for the Federal Reserve. It was agreed that the Federal Reserve, in order to minimize monetization of the debt, would immediately reduce or discontinue purchases of short-term securities and permit the short-term market to adjust to a position at which banks would depend upon borrowing at the Federal Reserve to make needed adjustments in their reserves. This contemplated a level of short-term interest rates which, in response to market forces, would fluctuate around the Federal Reserve discount rate. It was expected that during the remainder of the year the Federal Reserve discount rate, in the absence of compelling circumstances not then foreseen, would remain at 1¾ percent and that the Federal Reserve would operate to assure a satisfactory volume of exchanges in the refunding of maturing Treasury issues.

Fourth, the raising of new funds by the Treasury to finance the defense mobilization program presented other problems. It was recognized that there were no substantial amounts of nonbank funds seeking investment, and that it would be some time before such funds would accumulate. It was agreed that more frequent conferences between the Treasury and Federal Reserve officials and staff should be held so that the Federal Reserve might collaborate more closely with the Treasury in working out a joint program of Government financing as well as in maintaining orderly markets for Government securities.

EXHIBIT E

RELATION OF FEDERAL RESERVE POLICIES TO FISCAL POLICIES AND DEBT MANAGEMENT, 1946–OCTOBER 1949

(Answers to questions II.2.—II.4., inclusive, from Reply by Thomas B. McCabe, Chairman, Board of Governors of the Federal Reserve System, to the Questionnaire of the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report, November 1949.)

2. Cite the more important occasions since 1935 when Federal Reserve policies have been adjusted to the policies and needs of the Treasury.

a. What were the principal areas of agreement and what were those of conflict between the two agencies?

b. In what way were the differences adjusted?

c. When there were differences of opinion between the Secretary of the Treasury and the Federal Reserve authorities as to desirable support prices and yields on Government securities, whose judgment generally prevailed?

3. What were the principal reasons for the particular structure of interest rates maintained during the war and the early postwar period?

4. Would a monetary and debt management policy which would have produced higher interest rates during the period from January 1946 to late 1948 have lessened inflationary pressures?

These questions can best be answered as a group by describing the principal developments with respect to Federal Reserve policies and operations that were particularly influenced by, or had a bearing upon, Treasury policies and needs during the period. I want to point out in advance that I was not directly connected with the determination of these policies until the last 18 months of this period and, therefore, the discussion of events before that is based upon the available record.

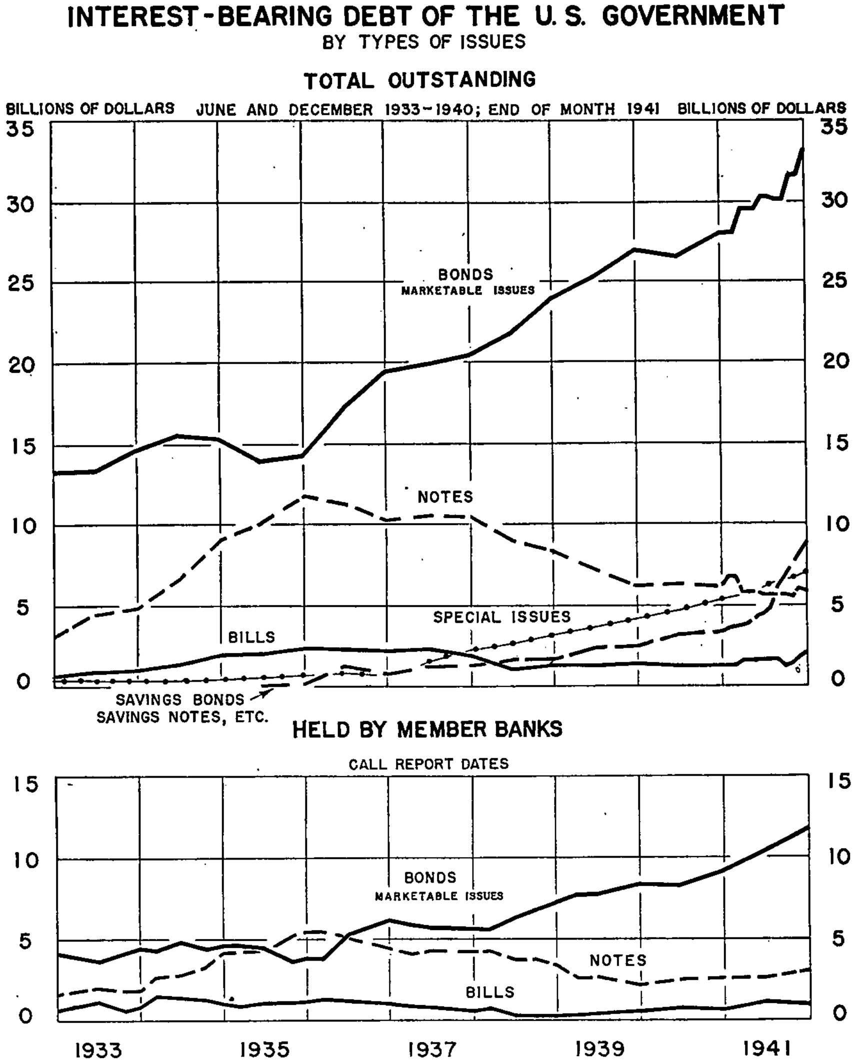
In the 15 years since 1935, the growth of the public debt and its management have been dominant elements in financial developments in the United States. During the early years of this period Government deficits resulted from expenditures to counteract depression and unemployment; later, financing of the war required unprecedented borrowings; and, finally, the problem of refunding and retiring parts of the vast public debt were of prime importance. Treasury needs were largely the result of taxation and expenditure policies determined by Congress and the executive authorities, first to combat depression and later to conduct a war. These situations required close contact between the Treasury and the Federal Reserve System.

It may be said that in general during this entire period the Treasury and the Federal Reserve were guided by the same broad objectives and there was a reasonable degree of consultation and coordination, with consideration on the part of each agency of the views and interests of the other. Such differences of opinion as appeared between the Treasury and the Federal Reserve were chiefly with reference to procedures to carry out common broad objectives. They reflected principally differences of judgment of the kind that might reasonably be expected. Even now when they can be viewed in retrospect, it is frequently difficult to judge as between them.

GROWING IMPORTANCE OF PUBLIC DEBT IN PREWAR PERIOD

During the period from 1935 to 1940 continued budget deficits and the consequent growth in the public debt accompanied a relatively small amount of private credit demands and an expansion in the supply of bank reserves resulting from gold inflows. This combination of developments caused banks to expand greatly their holdings of Government securities and gave increased importance to market fluctuations in prices and yields of Government securities. The expansion in the public debt took the form mainly of bonds. As shown in the chart (Chart 8) the volume of short-term Government securities outstanding actually decreased from 1936 to 1941 while bonds increased. These movements were reflected in bank portfolios where holdings of United States Government bonds increased while those of short-term securities declined. Treasury financing needs and operations, as well as market transactions in Government securities, thus became important money market factors and had to be taken into account in formulating Federal Reserve policies.

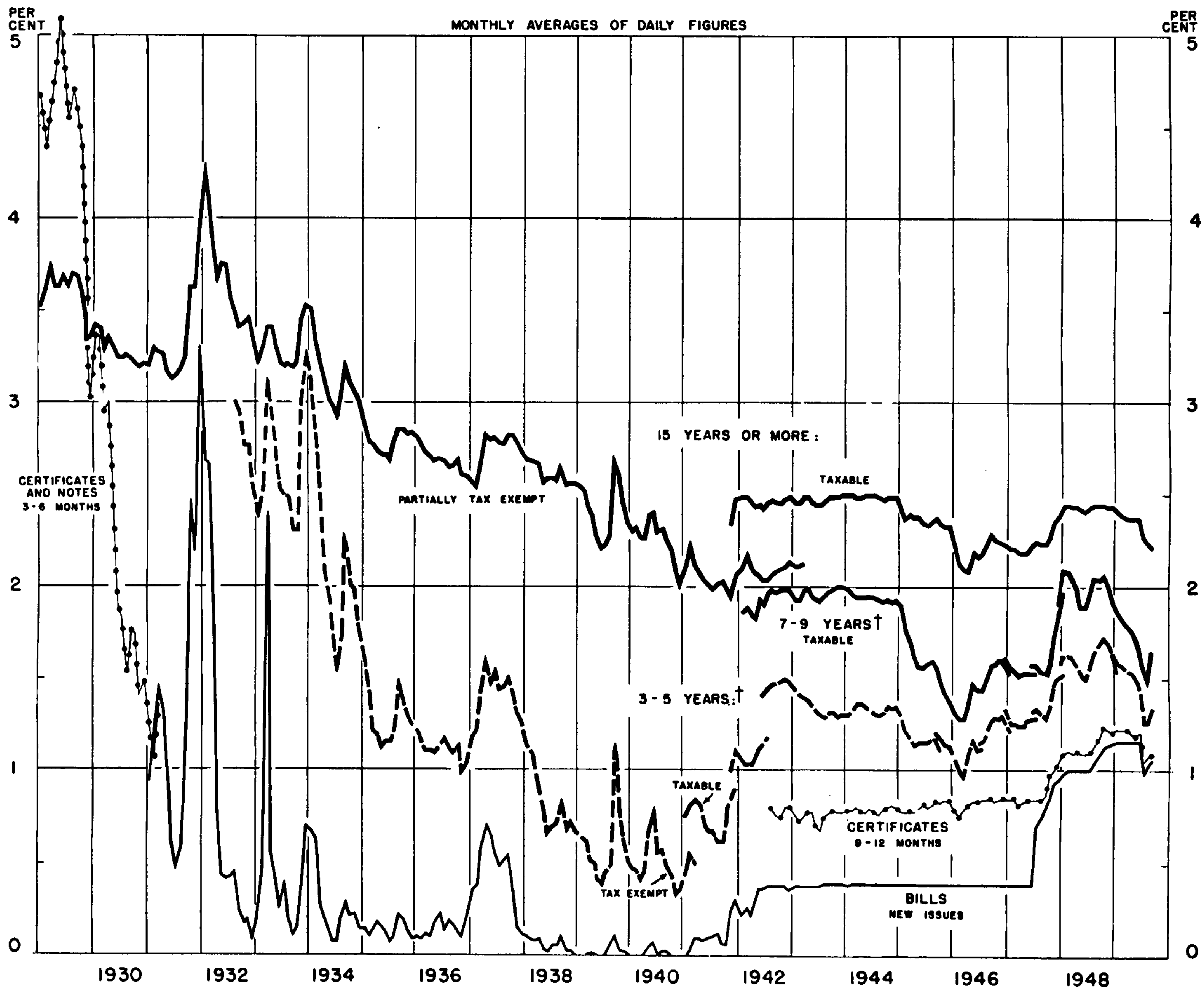
CHART 8



Term structure of interest rates.—During the 1935–40 period, as shown on the next chart (Chart 9) interest rates gradually declined. By the latter part of the period, rates on short-term Treasury bills were close to zero; yields on high-grade long-term bonds, Government and corporate, were at record low levels. The low interest rates then prevailing reflected the effect of a huge supply of loanable funds in relation to the demand for such funds. The supply had been greatly expanded by the heavy gold inflow which gave unprecedentedly large excess reserves to banks; it also included a substantial volume of savings held by investment institutions seeking investments of relatively low risk. Demand for loans by borrowers, other than the United States Government, was small because of depressed conditions in the economy, as well as because of the large amount of liquid funds already held by nonfinancial businesses and by individuals.

CHART 9

YIELDS ON U. S. GOVERNMENT SECURITIES



† BREAKS IN LINES REPRESENT CHANGES IN ISSUES INCLUDED.

The particular term structure or pattern of rates prevailing prior to the war reflected in large part the strong preference of lenders, and particularly of banks, for liquidity, together with a reduced supply of short-term assets which could be easily turned into cash. Such assets were in very large demand and commanded a substantial rate advantage over long-term securities. This desire for liquidity was a product of the rapid increase in available funds as well as of the experience of banks and other lenders in the early thirties when bond prices declined sharply.

Orderly market operations.—It was during this 1935–40 period that the Federal Reserve System accepted the responsibility for maintaining orderly conditions in the market for United States securities. In particular, the System gradually found it necessary to give more consideration to the bond market rather than to confine its operations largely to the short-term money market. When a sudden decline developed in the bond market in March and April 1937, it became quickly apparent that large-scale, and particularly disorderly, liquidation of bonds by banks could cause repercussions not simply in the Government bond market but also in capital markets in general, and possibly in the business situation. The Board of Governors in its 1937 Annual Report, after describing developments in the bond market in March and April 1937, made the following statement:

"Intervention by the Federal Reserve System in the bond market in March and April, therefore, helped to stabilize that market. In recent years the bond market has become a much more important segment of the open money market, and banks, particularly money-market banks, to an increasing extent use their bond portfolios as a means of adjusting their cash position to meet demands made upon them. At times when the demands increase they tend to reduce their bond portfolios and at times when surplus funds are large they are likely to expand them. Since prices of long-term bonds are subject to wider fluctuations than those of short-term obligations, the increased importance of bonds as a medium of investment for idle bank funds makes the maintenance of stable conditions in the bond market an important concern of banking administration."

A second comparable occasion arose at the outset of the war and the Board in its 1939 Annual Report explained its position as follows:

"In undertaking large-scale open-market operations in September 1939, the System was guided principally by the following considerations:

"(1) By helping to maintain orderly conditions in the market for United States Government securities the System can exert a steadying influence on the entire capital market, which is an essential part of the country's economic machinery, and disorganization in which would be a serious obstacle to the progress of economic recovery. The market for United States Government securities is the only part of the capital market in which the System is authorized by law to operate, and Government securities occupy a vital place in that market.

"(2) The System also has a measure of responsibility for safeguarding the large United States Government portfolio of the member banks from unnecessarily wide and violent fluctuations in price. The System cannot and does not guarantee any current prices of Government obligations, nor does it undertake to preserve for member banks such profits as they may have on their Government securities, or to protect them against losses in this account The Government security market, however, has become in recent years the principal part of the money market, and member banks are in the habit of adjusting their cash positions through sales and purchases of United States Government securities. This practice has arisen partly because of a shrinkage in the availability of other liquid assets, such as street loans and bankers' acceptances, which in earlier years were in much larger volume and were the medium through which banks were likely to adjust their positions. In the enhanced importance of the Government portfolio to member banks, the System sees an additional reason for exerting its influence against undue disturbances in Government security prices."

Bank examination policies.—During this same period official policies with regard to bank examinations were also revised in recognition of the growing importance of bonds in bank portfolios. The policy of not requiring deduction from capital of paper losses on highest grade bonds encouraged the banks to appraise their investment portfolios on a basis of longer range or intrinsic worth rather than by the precarious yardstick of current market quotations. Where declines in market prices of bonds reflect only changes in the level of long-term interest rates and not impairment of the credit position of the issuer, the position of investors holding the bonds is not materially affected unless they wish to sell them. For banks to sell bonds should be unnecessary when they have adequate secondary reserves in the form of short-term assets and when the Federal Reserve can make advances to meet any temporary needs.

FINANCING THE WAR

During the period of financing the earlier defense program and more particularly in that of heavy wartime expenditures, Treasury and Federal Reserve operations and policies were closely related. Treasury and Federal Reserve officials had frequent conferences and in other ways interchanged views with respect to plans for financing the war, organizing machinery for marketing United States Government securities, and developing and putting into effect credit policies that would meet the nation's war requirements while minimizing the inflationary effects.

At the beginning of the defense program banks had abundant excess reserves and the problem was in part one of preventing undue expansion of private credit under the stimulus of growing demands. With this situation in mind, various groups of Federal Reserve officials (the Board of Governors, the 12 Presidents of the Federal Reserve Banks, and the Federal Advisory Council) issued a joint report to Congress in December 1940, presenting a program of measures designed to provide the means for more effective restriction of possible inflationary developments.

As a part of the Government's program to combat inflation and for the purpose of reducing the large volume of excess reserves and thus establishing better contact between the Federal Reserve Banks and the money market, the Board in the autumn of 1941, after consultation with the Secretary of the Treasury, increased reserve requirements of member banks to the limit of its statutory power. At the time the Secretary of the Treasury and the Chairman of the Board issued the following statement:

"The Treasury and the Board of Governors will continue to watch the economic situation and to cooperate with other agencies of the Government in their efforts, through priorities, allocations, price regulation, and otherwise, to fight inflation. Recommendations on the question of what additional powers, if any, over bank reserves the Board should have during the present emergency and what form these powers should take will be made whenever the Treasury and the Board, after further consultation, determine that such action is necessary to help in combating inflationary developments."

When the United States entered the war in December 1941, the Board issued the following statement with respect to war finance:

"The financial and banking mechanism of the country is today in a stronger position to meet any emergency than ever before.

"The existing supply of funds and of bank reserves is fully adequate to meet all present and prospective needs of the Government and of private activity. The Federal Reserve System has powers to add to these resources to whatever extent may be required in the future.

"The System is prepared to use its powers to assure that an ample supply of funds is available at all times for financing the war effort and to exert its influence toward maintaining conditions in the United States Government security market that are satisfactory from the standpoint of the Government's requirements.

"Continuing the policy which was announced following the outbreak of war in Europe, Federal Reserve Banks stand ready to advance funds on United States Government securities at par to all banks."

Objectives of war finance.—During the war period the Federal Reserve System and the Treasury endeavored to coordinate their respective policies and actions toward common objectives. The major objective, as stated in the Board's Annual Report for 1942 and in other connections, was to derive the largest possible amount of war funds from current income and from savings and to depend as little as possible on the creation of bank credit. This objective was fully shared by the Treasury. It was recognized, however, that all Government expenditures could not be raised by taxation and borrowing from nonbank investors and that some borrowing from banks would be necessary to supply funds for an expanding war economy with its abnormal demands for money. Another important objective of the Federal Reserve as well as the Treasury in connection with war finance was the maintenance of the structure of interest rates at approximately the levels existing at the beginning of the war.

In furtherance of these aims, the Federal Reserve undertook to supply banks with additional reserve funds after those available at the beginning had been utilized. The large-scale purchases of Government securities by the Federal Reserve needed to keep short-term interest rates from rising fully supplied banks with all the reserves they needed to do their share in financing the war.

Discussions between the Treasury and the Federal Reserve during the war and postwar periods related particularly to the specific means of carrying out their common broad objectives in a manner that would augment to the smallest possible extent inflationary pressures, both immediately and in the future. It was recognized that the policies being followed were necessary in view of the exigencies of war finance and that inevitable inflationary developments would have to be restrained largely by use of other measures of control such as rationing and price fixing. It was acknowledged that, although the war might be financed at even lower rates of interest through the Federal Reserve and the banks, such policies would make more difficult the control of inflation through other measures and would also intensify postwar difficulties. Thus, a difficult combination of measures was needed—ready availability of additional reserves required for war finance but at the same time all feasible attempts to limit bank participation, which would unduly inflate the supply of money.

Any differences in point of view between the two agencies reflected their respective areas of operations and the policies adopted were determined after consideration of the various views. The Treasury had the direct responsibility for marketing an unprecedented volume of new issues, while it was the responsibility of the Federal Reserve to safeguard the credit structure as much as possible from current and prospective inflationary effects of these issues, particularly issues that were absorbed into the banking mechanism. The chief concern of the Federal Reserve was to place greater limitations on purchases by banks, actual or potential, of long-term, higher-interest bearing securities. The Treasury was conscious of this problem and devised special securities, non-eligible for bank holding, tailored to tap specialized sources of savings funds. It also increased greatly the volume of short-term issues outstanding. Discussions between the agencies when differences of emphasis emerged related largely to the level and structure of short-term interest rates and the amounts and types of longer-term issues that were available for purchase by banks.

The results of war-financing policies are illustrated in the chart previously presented showing yields on United States Government securities and that on the distribution of the public debt by types of issues which follows this page (chart 10). The interest-rate structure showed little changed until 1945 when longer-term rates declined. All types of Government securities showed substantial increases. Commercial banks added large amounts to their holdings of bonds, as well as to holdings of notes and certificates, but after 1942 reduced their buying of bills. Bills and other short-term securities were purchased in substantial amounts by the Federal Reserve throughout the war.

Level and structure of interest rates.—The wide spread between short- and long-term interest rates, inherited from the prewar period of easy money, created some difficult problems under conditions of war finance in which funds had to be raised in unprecedented volume. Both the Treasury and the Federal Reserve were in full agreement that, for purposes of war financing, it would be desirable to finance the war at relatively stable interest rates. This conclusion was reached on the basis of the experience gained in financing World War I and was designed to eliminate the incentive to defer subscriptions in expectation of progressively rising interest rates. The decision to maintain a stable structure of interest rates was made to serve the following purposes:

(1) To encourage prompt buying of securities by investors, who might otherwise have awaited higher rates;

(2) To assure a strong and steady market for outstanding securities;

(3) To keep down the interest cost on the war debt; and

(4) To limit the growth in bank and other investors' earnings from their public debt holdings.

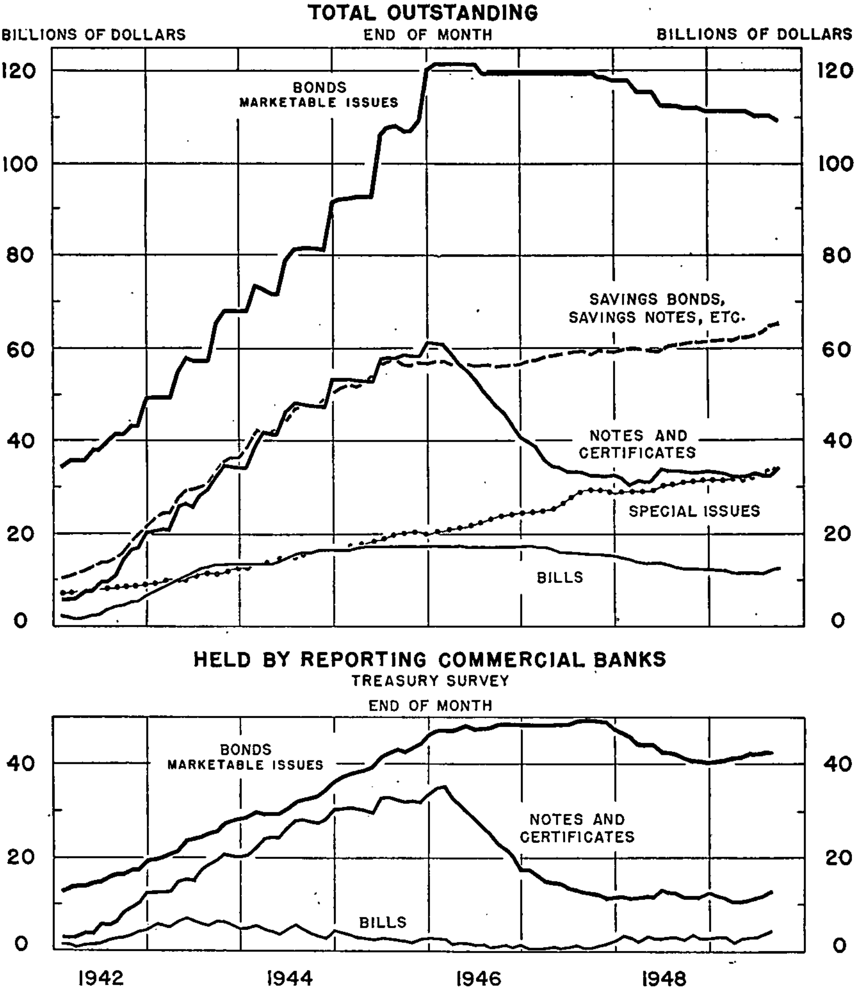
It became the responsibility of the Federal Reserve authorities consequently to see to it that sufficient reserves were made available to maintain a stable interest rate level.

Both the Treasury and Federal Reserve were also in full agreement that, if war financing was to be rapidly launched with a minimum of difficulties, it would not be desirable to make any substantial adjustment in the pattern of short- and long-term rates that prevailed at the time. Maintenance of a fixed structure of rates, however, gave a strong incentive to investors "to play the pattern of rates," i. e., to purchase longer-term securities not to hold to maturity but for resale at higher prices as maturity approached. With the low level of

CHART 10

INTEREST-BEARING DEBT OF THE U. S. GOVERNMENT

BY TYPES OF ISSUES



short-term rates stabilized by action of the Federal Reserve, there was no possibility that corrective market forces would eliminate the incentives that encouraged the practice.

These related decisions were shared by the Treasury and the Federal Reserve. As events developed and it became evident that the financing of the war was involving ultimately much larger amounts than were generally expected at the time these basic decisions had to be made the task of stabilizing an abnormal rate pattern created serious problems for the Federal Reserve. These problems led to a variety of suggestions for modifications in the war finance program. They became much more serious under conditions of reconversion after the war. The System suggestions in general fell under three heads; moderate adjustments in short-term rates to narrow the spread, further measures to limit purchases of securities by banks particularly the longer-term issues, and more offerings to nonbank investors of long-term bonds with restricted marketability. Some of these suggestions were adopted or led to modifications or changes in programs.

At the time, and even now from the vantage point of retrospect, one cannot be categorical about these suggestions or about their results. The money market is a complex structure and the needs of war finance were without precedent. Looking backward, it still seems that the decision not to let interest rates rise during the war was right in that the war was financed at an exceptionally low interest cost, the Treasury had no difficulty in obtaining all the funds it needed, and there was no lack of confidence in Government securities. The most important lesson of the war-financing experience is that it was desirable to have a stabilized level of rates during the war, but not necessarily the particular highly abnormal structure of rates which happened to exist at the beginning of the war.

In looking back on these problems, which antedate my coming to the Board, as well as in discussing those with which I have had to deal, I have sought to review the entire period covered by the questionnaire, not as the advocate, but in a more judicial spirit, mindful of the end result which was a truly splendid achievement in financing the most devastating and costly war of all time and in restoring the country to full peacetime production and employment.

PROBLEMS OF POSTWAR INFLATION

In the transition period from a war to a peacetime economy the inflationary problem became more acute, notwithstanding the termination of heavy Government deficits. The development of inflation was made possible primarily by the large volume of liquid assets built up during the period of war finance, accompanying shortages of goods and deferred demands, but it was augmented by postwar expansion of credit to private borrowers. Liquidation of Government securities was an important source of funds for current spending and for credit expansion, and the Federal Reserve found it necessary to purchase securities in order to maintain a stable and orderly market for Government securities. These purchases supplied additional bank reserves. Under the circumstances action for counteracting inflationary developments had to be limited to relatively moderate measures.

Federal Reserve officials were thoroughly aware of the dilemma presented by the conflicting problems of debt management and monetary policy in the postwar period and endeavored by various means to restrict credit expansion while at the same time stabilizing the market for Government securities. The Treasury also endeavored through fiscal and debt retirement operations and the use of its deposit balance to exert an anti-inflationary influence. Proposals were made by the Federal Reserve for legislation to provide additional powers needed to deal more effectively with the situation, but none of these was adopted until the summer of 1948.

Following is a summary of developments and of measures adopted or considered by the Treasury and the System with respect to debt management and monetary policy in the postwar period.

Playing the pattern of rates.—The practice of playing the pattern of rates increased considerably in 1945 and became most prevalent early in 1946. It resulted in such a rise in bond prices that market yields on long-term restricted bonds declined to a little over 2 percent, while those on medium-term bank eligible bonds declined below 1½ percent, as shown in the chart previously presented. The short-term securities sold were largely purchased by the Federal Reserve, and the bank reserves thus created were pyramided into a larger volume of bank credit expansion and consequently a further rapid growth of bank deposits.

One remedy for this situation would have been to permit short-term rates to rise to a point at which such shifts were not sufficiently profitable. The System, however, recognized the disadvantage to the Treasury, as well as the possible disturbance in the Government securities market, of any marked advance in short-term rates. Attempts were made to solve the problem by other means, while moderate adjustments in some rates most out of line were recommended by the Federal Reserve.

Preferential discount rate.—In 1945, the System came to the conclusion that it should discontinue a preferential discount rate of one-half of 1 percent on 15-day advances to member banks secured by short-term Government securities established early in the war to encourage banks to purchase and hold such Government securities. Banks were using this facility at times to hold Government securities when faced with a loss of reserves, and this use served to create additional reserves. The Treasury opposed the proposed elimination of this rate, but the change was finally made in April 1946.

Elimination of bill-buying rate.—Federal Reserve authorities in 1945 and 1946 considered the discontinuance of the bill-buying rate of three-eighths of 1 percent and the repurchase option established early in the war. It was proposed that the rate on bills be permitted to approach the 7/8 percent rate on 1-year certificates, with support of the latter rate continued at that level. The purpose of these steps was to reduce the abnormal spread in the pattern of rates and to encourage banks to hold more bills. In 1947 the Treasury concurred in the discontinuance of the buying rate on bills and the repurchase option as a part of a program in which an increase was permitted also in the rate on certificates. This action is discussed below.

Special reserve requirement.—In order to place limitations on bank credit expansion on the basis of reserves created by purchases of Government securities by the Federal Reserve and at the same time avoid a substantial rise in interest rates, the Board of Governors proposed various special measures of legislation for consideration by Congress. These proposals were first presented in the Board's Annual Report for 1945 and more definitely recommended in modified form on various subsequent occasions. The principal proposal was for the System to be granted authority to require that banks hold, in addition to other required reserves, special reserves in the form of Treasury bills or Treasury certificates of indebtedness, balances with Federal Reserve Banks, or other cash assets.

This proposal was designed to give the Federal Reserve means of further restricting bank credit expansion, without raising interest rates on Treasury obligations, but it was not enacted by Congress. In August 1948 Congress gave the Board emergency authority to raise reserve requirements for member banks by limited amounts. This authority, which is discussed in a later section, was used in part and served some of the purposes aimed at by the other proposals.

Treasury debt retirement.—Use by the Treasury of surplus cash to retire bank-held securities became the dominant anti-inflationary factor of the postwar period. This action served to diminish the practice by banks of shifting from short-term to long-term securities, which during 1945 and 1946 provided the basis for expanding bank reserves. In 1946 the Treasury offered new issues in exchange for only a portion of maturing securities and the remainder were redeemed for cash, drawing upon a large Treasury cash balance in excess of needs built up in the Victory Loan Drive at the end of 1945. This policy brought about some decline in the volume of bank credit to the extent that commercial banks held the redeemed securities and of bank reserves in the case of securities held by the Reserve Banks. In this way the liquidity position and also the reserves of banks were reduced. As a consequence banks were less willing to dispose of additional amounts of short-term securities in order to purchase longer-term issues.

Beginning in 1947 the Treasury confined its retirements largely to Federal Reserve holdings of maturing certificates and to Treasury bills, of which the Federal Reserve held the major portion. Substantial retirements of maturing securities were made from the proceeds of a budgetary surplus and also by use of funds obtained through sales of savings bonds to the public. This policy, which resulted in a direct drain on bank reserves and on bank liquidity positions, was continued into early 1949 and was by far the most important and effective measure of restriction on inflationary credit expansion.

Increase in bank loans.—Another development which brought to an end bank purchases of long-term securities, but not their selling of short-term securities, was the growing demand for bank loans. Loans to businesses, consumers, and property owners increased sharply during 1946 and 1947. In order to meet these demands banks sold securities to the Federal Reserve. These sales created reserves which supplied the basis for multiple credit expansion.

Rise in short-term rates.—In the middle of 1947 the Federal Reserve and the Treasury agreed upon a policy of permitting rates on short-term securities to rise. This policy and its purposes were described in the Board's Annual Report for 1947 (page 5) as follows:

"Beginning in July the Federal Reserve System and the Treasury adopted measures to permit some rise in interest rates on short-term Government securities in order to increase their attractiveness to banks and other investors and to place an additional restraint on further monetary expansion. The System discontinued its buying rate on Treasury bills, which had been fixed at 3/8 percent since 1942. The rate on bills rose during the remainder of the year to nearly 1 percent, as is shown in the chart. The length of term to maturity of newly offered Treasury certificates was shortened in August and September and subsequently higher issuing rates were placed on new issues. These rates rose from 7/8 percent to 1 1/8 percent by the end of the year."

The policy, which continued until the rate on certificates had reached 1 1/4 percent in October 1948, was effective in reducing the shifting of short-term securities to the Federal Reserve and in encouraging banks to increase their holdings of such securities. There developed a tendency on the part of banks to reduce holdings of long-term securities and to buy short-term securities, as well as to expand their loans. This tendency reflected in large part the gradual retirement of maturing bonds and their refunding into short-term securities. It showed a willingness on the part of banks, for liquidity reasons, to hold short-term securities at moderately lower rates than bond yields, whereas they would not do so at very low short-term rates. The profits of playing the pattern of rates were substantially reduced. Another factor in this change probably was a feeling that the rise in short-term rates might lead to a reduction in premiums on bonds.

In any event, during 1947 and part of 1948 banks in general reduced their holdings of Treasury bonds and increased somewhat their holdings of bills. The higher short-term rates, therefore, had the desired effect of encouraging banks, as well as others, to hold short-term securities. As a consequence, the Reserve System was enabled to reduce its holdings and thereby absorb bank reserves. To some extent the reserves absorbed were supplied by System purchases in supporting the bond market, as explained below.

While the Treasury and the Federal Reserve were in general agreement on the policy of higher short-term rates, Federal Reserve authorities favored somewhat more frequent increases in rates. It was hoped that the rise in short-term rates would permit a somewhat more flexible policy in open market operations. Since a rigid pegging of all rates prevents money-market forces from developing their own correctives, the change in policy was looked upon as a step toward reducing the ready availability of bank reserves provided by rigidly maintaining short-term rates at low levels.

Nonbank sales of securities and Federal Reserve support of bond prices.—In the latter part of 1947 investment institutions and other nonbank holders of securities began to sell Treasury bonds in substantial amounts. This movement reflected primarily growing demands for investment funds on the part of the borrowers, particularly corporations, State and local governments, and property owners. Partly because of these demands and partly because of credit restriction measures, money rates and bond yields generally rose during the last half of 1947. This movement began to be reflected in the Government bond market and caused a sharp decline in the prices of these bonds from the high premiums at which they had been selling. As a result, the nature of the problem changed from one in which the Federal Reserve was buying short-term securities, while the market bought bonds, to one in which the Federal Reserve was called upon to purchase large amounts of bonds.

A considerable degree of uncertainty developed as to the maintenance of support buying by the Federal Reserve or as to the prices at which support would be supplied. A broad wave of bond selling ensued. The System maintained its purchases but late in December 1947 support prices were lowered to a level which would keep all bonds at par or slightly above. Widespread selling of bonds by nonbank investors slackened somewhat in the spring of 1948 but was resumed in the summer. Finally, in November 1948, selling definitely slackened. Subsequently the Federal Reserve was able to reduce its holdings, and did so after consultation with the Treasury.

During the period of support operations, questions arose as to the advisability of the Federal Reserve continuing to supply inflationary funds through purchasing at par or higher prices Government bonds being sold by investors to shift funds to other uses. It was suggested that an effective means of restraining inflation would be not to provide funds for these purposes so readily and to permit higher long-term interest rates to operate as a restraining influence. The large-scale purchase of bonds by the Federal Reserve accentuated inflationary developments, and presumably a contrary policy would have exerted a strong anti-inflationary influence, since increasing long-term interest rates has generally been a more effective deterrent on business commitments and plans than increasing short-term rates.

The Federal Reserve, however, was in entire accord with the Treasury that maintenance of a stable and orderly market for Government bonds was an overriding objective under conditions prevailing at that time. It was agreed that the longest-term bond should not be permitted to decline below par. Considerations entering into this decision included the unprecedented volume of Government bonds outstanding, the large refunding problem of the Treasury, the possibility that fear of declining bond prices would lead to much more liquidation, and concern that a decline in bond prices might cause a deterioration in the position of many financial institutions holding large amounts of bonds. As I stated before the Senate Banking and Currency Committee on May 11, 1949:

"In retrospect, I am certain that our action in support of the Government securities market was the right one. That program was a gigantic operation. In the 2 years 1947 and 1948, the System's total transactions in Government securities amounted to almost $80 billion. Despite this huge volume of activity, the net change in our total portfolio was relatively small. I am convinced that we could not have abandoned our support position during this period without damaging repercussions on our entire financial mechanism as well as seriously adverse effects on the economy generally."

It needs to be recognized in the long run, however, that interest rates perform an economic function and should reflect the relation between the supply of savings and the needs for capital formation. To keep down the rate of interest by making credit freely available at a time when capital demands exceed current savings has an inflationary result. Conversely, to increase rates of interest and thereby discourage borrowing at a time when business activity is low, is conducive to further contraction. Monetary policies should be flexibly adapted to the changing needs of the economy. However, in view of the large outstanding public debt and its widespread distribution, the Federal Reserve faces the dilemma of endeavoring to follow flexible monetary policies without detracting from the willingness of investors to be firm holders of Government securities.

Increase in reserve requirements.—While the System could not stop purchases of Government securities and still maintain a stable bond market, it had some power to limit the effect of such purchases upon bank credit expansion. As pointed out, higher short-term interest rates operated toward this end by encouraging banks and others to buy short-term securities from the Federal Reserve. Increases in bank reserve requirements also provided a means of immobilizing the additional reserves created by Federal Reserve purchases of securities from nonbank investors, so that they would not give the basis for a further multiple credit expansion.

During the first half of 1948 the Board exercised virtually all the remaining authority it had to increase reserve requirements. The authority it had not exercised was limited to central reserve city banks. Requirements against demand deposits of these banks were raised by two points in February and again in June and these increases added about a billion dollars to required reserves.

In August 1948 Congress granted the Board emergency powers to increase reserve requirements for all member banks, and increases made under this authority in September absorbed about $2 billion of reserve funds. These increases in reserve requirements just about offset additional reserves supplied during the previous 10 months by net purchases of securities from nonbank investors. They served to reduce the liquidity positions of banks and thereby to discourage further extensions of credit.

ABATEMENT OF INFLATIONARY PRESSURES

In view of the changed economic situation that became apparent early in 1949, the Board took action in May and June to reduce reserve requirements of member banks. The emergency power to raise reserve requirements expired June 30, 1949. On June 28 the Federal Open Market Committee issued the following statement:

"The Federal Open Market Committee, after consultation with the Treasury, announced today that, with a view to increasing the supply of funds available in the market to meet the needs of commerce, business, and agriculture, it will be the policy of the Committee to direct purchases, sales, and exchanges of Government securities by the Federal Reserve Banks with primary regard to the general business and credit situation. The policy of maintaining orderly conditions in the Government security market, and the confidence of investors in the Government bonds will be continued. Under present conditions the maintenance of a relatively fixed pattern of rates has the undesirable effect of absorbing reserves from the market at a time when the availability of credit should be increased."

In August 1949, after further consultation with the Treasury, additional reductions in reserve requirements were made on the basis of permanent statutory authority to release about $1.8 billion of reserves. This series of reductions in reserve requirements resulted in a substantial demand by banks for Government securities. Bond prices rose sharply and yields on short-term securities declined. For the purpose of maintaining orderly conditions in the money market, the Federal Reserve met the demand for short-term securities by selling a part of the System portfolio and thus moderated the decline in money rates.

At the same time the System discontinued the practice of freely selling Government bonds. With the adoption of this policy, pressure of market forces brought about a decline in yields on medium- and long-term Government securities. This had the effect of encouraging investors to seek corporate and municipal securities and mortgage loans as outlets for the funds they had available for investment.

This greater flexibility in open market-policy places the System in a better position to carry out its functions in adjusting to changed economic conditions.

Exhibit F

Federal Reserve Credit Policies and Actions, November 1949–February 1951

(Excerpts from Thirty-seventh Annual Report of the Board of Governors of the Federal Reserve System, covering operations for the year 1950)

In 1950, the year covered by this Thirty-seventh Annual Report of the Board of Governors of the Federal Reserve System, inflationary pressures again became a challenge to credit and monetary policy. The general economic situation became especially inflationary following the outbreak of hostilities in Korea and the inauguration of a far-reaching program of national defense in the United States. In consequence, the Government instituted a comprehensive program to restrain inflation, with primary reliance upon fiscal and monetary measures. In accordance with this program, Federal Reserve policy was directed toward restricting, so far as possible, the availability of bank reserves on which multiple credit expansion could be based.

At the time of the international crisis businesses and consumers, with high and rising incomes and ample credit, were already buying a record volume of goods and services. After June civilian buying expanded sharply. It was stimulated by anticipation of shortages and supported by a continued rise in incomes, extensive use of credit, and considerable drawing on accumulated liquid assets. Prices advanced rapidly. Federal Government expenditures for defense, which had declined slightly in the early months of the year, rose at an accelerating but moderate rate as the defense effort gained momentum. Nevertheless, for the year as a whole, Federal cash receipts and expenditures remained in approximate balance. * * *

Federal Reserve credit policies in the first part of the year were directed toward modifying prevailing conditions of extreme monetary ease. When pressures for credit and monetary expansion became greatly intensified after June, the Federal Reserve authorities on August 18 issued the general statement of policy given below. Action during the remainder of the year was directed toward implementing this policy while at the same time aiding Treasury refunding operations.

Modification of credit ease in first half of 1950.—The year began in a financial climate of decided credit ease resulting from a series of policy actions taken some months earlier to promote recovery from the 1949 downturn. During the first few months of 1950, as the economy advanced to higher levels of production and employment with prices increasing in some sectors, the System moved ahead with a program formulated in November 1949 for modifying prevailing easy credit conditions. In January the Federal Reserve sold United States Government securities in order to absorb reserves which were supplied to banks largely by a seasonal return of currency from circulation. Over the following 5 months open market purchases and sales of Government securities were conducted so as to remove some of the stimulus to credit growth and to hold member bank reserves at about the level reached at the end of January.

In the long-term market investment funds were readily available at very low rates by early 1950. Insurance companies, pension funds, and personal trusts, in particular, had substantial amounts available, reflecting both extensive current savings and a backlog of funds previously accumulated. Under the impact of abundant investment funds, capital values were increasing and prices of long-term bonds were subject to considerable upward pressure.

In order that sustained expansion in production and employment should not be jeopardized by overextension financed through long-term credit and by excessive price increases, the Federal Reserve early in 1950 began to sell freely from its portfolio of long-term Government bonds, so as to absorb some of the long-term funds seeking investment. This was continued over the first 8 months of the year and in that period the Federal Reserve sold $2.5 billion of long-term bonds that were not eligible for purchase by commercial banks.

Federal Reserve action to modify the conditions of monetary and credit ease was reflected in moderate changes in interest rates. Rates on short-term Government securities, which had begun to rise in late 1949, moved irregularly higher for several months. By the end of April 1950 they had advanced about ⅛ of 1 percent and reached levels close to those prevailing in the spring of 1949. The decline in yields on long-term securities which had continued since mid-1949 was arrested early in 1950 and in part reversed in the following several months. Over the first half of 1950 yields on long-term Government bonds not eligible for bank investment increased somewhat more than ⅛ of 1 percent. Yields on corporate bonds remained stable for several months early in the year and thereafter tended to rise slightly. Yields on State and local government issues remained steady throughout the first half of the year. * * *

In recognition of the need for limiting the expansion of purchasing power based on credit, the Federal Reserve System on August 18 announced its intention to restrain the expansion of bank credit. On that day the following statement was issued jointly by the Board of Governors and the Federal Open Market Committee:

"Within the past 6 weeks loans and holdings of corporate and municipal securities have expanded by $1.5 billion at banks in leading cities alone. Such an expansion under present conditions is clearly excessive. In view of this development and to support the Government's decision to rely in major degree for the immediate future upon fiscal and credit measures to curb inflation, the Board of Governors of the Federal Reserve System and the Federal Open Market Committee are prepared to use all the means at their command to restrain further expansion of bank credit consistent with the policy of maintaining orderly conditions in the Government securities market.

"The Board is also prepared to request the Congress for additional authority should that prove necessary.

"Effective restraint of inflation must depend ultimately on the willingness of the American people to tax themselves adequately to meet the Government's needs on a pay-as-you-go basis. Taxation alone, however, will not do the job. Parallel and prompt restraint in the area of monetary and credit policy is essential."

Increase in discount rates.—Following the policy statement of August 18 the discount rates of all the Federal Reserve Banks were increased from 1½ to 1¾ percent. This action served to emphasize the intention to resist extending Federal Reserve Bank credit to support an inflationary expansion of bank credit and deposits. To the extent that member banks borrowed from the Reserve Banks, the action also increased the cost of additional reserves.

Open market operations in second half of 1950.—Beginning in mid-August the Federal Open Market Committee directed its open market operations with a view to restraining bank credit expansion by limiting the availability of bank reserves. It minimized Federal Reserve purchases of short-term United States Government securities in order to discourage the sale of Government securities by banks and other investors, and to encourage investors to hold or to buy securities.

From the end of June to mid-August banks had reduced their portfolios of Government securities by about $1.5 billion in order to obtain funds for expanding loans and purchasing municipal and corporate securities. About $1 billion of short-term Government securities had been purchased by the Federal Reserve during this period, but the effect of these purchases on member bank reserves had been offset by sales to nonbank investors of about $1 billion of long-term Government bonds. By mid-August, however, the market demand for long-term bonds was tapering off and the Federal Reserve had less leeway for selling such securities in order to offset its purchases of other securities.

Following the Federal Reserve policy announcement of August 18, the Open Market Committee purchased $8 billion of Government securities maturing on September 15 and October 1 to assure the success of Treasury refunding operations, which called for the exchange of maturing issues into 1¼ percent 13-month notes. At the same time, in order to offset additions to the System portfolio and to bank reserves resulting from these support purchases, the System made sales of other securities from its portfolio at somewhat higher yields. On balance, Federal Reserve purchases exceeded sales in this period and bank reserves increased.

Beginning in September the System also made moderate purchases of restricted bonds, for the purpose of maintaining orderly market conditions when insurance companies and other institutions sold such bonds in order to acquire mortgages and other assets returning higher yields. During October and November there was little change on balance in System holdings of Government securities. In December there were relatively large additions to the Federal Reserve portfolio and a considerable increase in bank reserves. These reflected some liquidation of nonbank holdings of Government securities, in part to meet large cash needs over the year-end, and some sales of issues maturing on December 15 and January 1 by holders who did not take the 5-year notes offered in exchange.

The expansionary effect of net open market purchases during the second half of the year was partly offset by a net outflow of gold, which exerted a drain on member bank reserves and a restrictive influence on the money market generally.

Rise in interest rates.—Growing credit demands tended to stiffen short-term money rates further during the last half of 1950. Federal Reserve purchases of short-term Government securities in support of Treasury refunding operations tended on balance to moderate the rise in rates, notwithstanding offsetting sales of other securities by the System. By the end of the year short-term rates were at levels higher than at any time since the early thirties. * * *

Increase in reserve requirements.—On December 29, the Board announced an increase in reserve requirements for member banks of 2 percentage points on demand deposits and 1 percentage point on time deposits. Reserve requirements on net demand deposits at reserve city and country banks were raised to the maximum legal limits of 20 and 14 percent, respectively, the same requirements that had prevailed during the war period. Requirements on net demand deposits at central reserve city banks were placed at 24 percent, 2 percentage points less than the maximum under existing authority but above requirements that had prevailed for these banks during most of the war period. Requirements on time deposits at all classes of banks were placed at the legal maximum of 6 percent. These increases became effective gradually in the period January 11–February 1, 1951 * * *.

The Board's action increased the reserves required of member banks by approximately $2 billion, which amount could otherwise have been the basis for about a sixfold increase in bank credit. The volume of bank credit and the money supply had continued to increase despite restraining action by the System; and, with the post-holiday return flow of currency from circulation, banks would have had additional funds available for lending. The purpose of the increase in reserve requirements was to absorb such funds and generally to reduce the ability of banks further to expand credit. The banks were in a position to adjust to the increased requirements without difficulty.

30. Analyze the effects of the rising yield upon short-term Governments between August 1950 and March 1951, from the standpoint of (*a*) effect upon the volume of bank loans, (*b*) effect upon the level of private interest rates and the differential between those rates and the yield on Governments, (*c*) effect upon the market prices and the volume of sales of long-term Governments, (*d*) effect upon the policy of the Federal Reserve to support the long-term Governments.

During the period mid-August 1950 through February 1951, there was a small rise in money rates resulting from a sharp and inflationary expansion in private demands for credit. Pressure of these demands upon available supplies of credit was substantially moderated by Federal Reserve System operations which supplied additional bank reserves. As a consequence, credit expansion was made possible and the rise in interest rates was kept within narrow limits.

During this period the Federal Reserve System undertook the following actions affecting the availability of funds and money rates: (1) In August the discount rate was increased from $1\frac{1}{2}$ percent to $1\frac{3}{4}$ percent, and market pressures were allowed to express themselves in somewhat higher yields. (2) The System also bought a large amount of short-term Government securities in support of Treasury refunding operations in September and December. (3) There was active private demand for long-term capital, and, with the System supporting prices and maintaining yields of long-term Government securities, substantial System purchases of long-term Government securities were necessary. (4) At the same time, in order to absorb as much as possible of the additions to bank reserves resulting from its support purchases, the System sold other short-term securities in the market. (5) In January reserve requirements of member banks were raised by the Federal Reserve. The first, fourth, and fifth of these actions were designed to be restrictive, but the other two, under the circumstances, were inflationary. On balance these operations permitted inflation to continue but tended to restrain its pace.

Yields on short-term Government securities increased over the period by slightly less than one-fourth of 1 percent. The increase came largely in two steps, one in the last half of August and the other over the last half of October and early November. At about the time these changes in short-term yields occurred, there was also a small upward movement in yields on intermediate-term Government securities. Yields on long-term Government securities rose only very slightly.

During this period there was a heavy private demand for, and a very large expansion of, credit to nearly all classes of private borrowers, including particularly businesses, consumers, and purchasers of real estate. Not only did bank loans increase but insurance companies and other lending institutions also increased their loans to private borrowers by amounts that exceeded the increase in their total resources. These institutions obtained the additional funds by selling Government securities. The fact that interest rates rose so little in the face of a demand for credit of this magnitude reflected Federal Reserve support operations which resulted in a substantial expansion in Federal Reserve credit and in bank reserves. The Federal Reserve System increased its total holdings of Government securities during the period by $3.9 billion. Bank reserves were expanded by $3 billion, of which less than $2 billion was absorbed by the action of the Board in January 1951 increasing member bank reserve requirements. The Federal Reserve bought both short-term and long-term Government securities, first to limit and finally to stop increases in their yields.

(*a*) *Effect on bank loans.*—In the months prior to the outbreak in Korea, many banks and also insurance companies were attempting aggressively to expand their loan volume. In large part, the widespread interest on the part of lenders in promoting their lending activities stemmed from the exceptional liquidity and low earning power of their Government security portfolios—both of which reflected past and current Federal Reserve open market activities.

The moderately restraining action taken after the Korean outbreak had some effect in curbing bank credit expansion. The increase in the discount rate tended to alert bank management and other lenders to the need for more cautious lending policies. The small increases that were permitted in yields on short-term and intermediate-term Governments made it necessary for the average bank to take some losses on sales of these securities when it wished to sell in order to expand loans. This exerted some restrictive influence. The increase in reserve requirements reduced the liquidity of banks, thus modestly discouraging further sales of short-term securities for the purpose of making loans.

Commercial bank loan expansion in the August–February period nevertheless amounted to over $7½ billion. The Federal Reserve view is that, had it not been for the limited program of credit restraint that was undertaken, loan expansion would have been greater.

As it turned out, it was not possible during the period August 1950 through February 1951 to carry out adequately the August 18 decision to undertake a limited program of general credit restraint. Immediately after the System in mid-August 1950 began to strengthen its efforts to curb inflation through monetary and credit action, it became necessary to buy Government securities in volume in support of an exceptionally large Treasury refinancing program. After the refunding was out of the way, short-term yields tended to adjust upward further in response to pressures in the credit market. The increase permitted, however, was very small. Under the circumstances, the policy of credit restraint could not be followed far enough to make the discount rate effective. Beginning in mid-November, both short-term and long-term yields on Government securities were again firmly pegged until the Treasury-Federal Reserve accord in early March.

(*b*) *Comparison of changes in private and Government interest rates.*—Federal Reserve action to moderate the increase in yields on short-term Government securities that tended to occur in the period August 1950 through February 1951 also moderated the increase in rates on private credits. Such increases in rates as occurred on both types of credit were products of the same set of forces—that is, an increase in the demand for credit relative to the supply of credit available. Action was taken by the Federal Reserve to prevent the increased demand for credit from having its full effect on yields on Government securities. This action expanded the volume of bank reserves thus permitting multiple credit and deposit expansion, and it increased the money supply directly, providing nonbank savings institutions with a source of funds for private lending beyond what was available to them from new savings and repayment of old loans. As one repercussion of these developments, the rates on non-Federal borrowing increased only moderately, even though there was a record demand for such credit to finance a large and inflationary accumulation of inventories and a spurt in other private spending that was in record volume.

Average yields on short-term and long-term Government securities, on corporate bonds, on prime commercial paper and bankers' acceptances, and on bank loans to businesses are shown in the table for the period June 1950 through March 1951. As the figures indicate, short-term interest rates on private credit increased somewhat more from August through February than did yields on Treasury bills or intermediate-term Government securities and the spread between them widened accordingly. Yields on the higher grades of corporate bonds and yields on long-term Government securities were approximately stable over this period. Average yields on lower grade corporate bonds (represented in the following table by Baa issues) were more affected during this period by growing corporate profits and consequent improvement in the risk position of these issues than by the very small changes in long-term interest rates.

Average yields on selected credits

[Percent per annum]

Month	U. S. Government securities			Prime commerical paper	Bankers' acceptances	Business loans	Corporate bonds		
	Bills	3-5 years	Over 15 years				AAA	A	Baa
1950—June	1.174	1.47	2.33	1.31	1.06	2.68	2.62	2.90	3.28
July	1.172	1.45	2.34	1.31	1.06		2.65	2.92	3.32
August	1.211	1.45	2.33	1.44	1.16		2.61	2.87	3.32
September	1.315	1.55	2.36	1.66	1.31	2.63	2.64	2.88	3.21
October	1.329	1.65	2.38	1.73	1.31		2.67	2.91	3.22
November	1.364	1.62	2.38	1.69	1.31		2.67	2.92	3.22
December	1.367	1.64	2.39	1.72	1.31	2.87	2.67	2.91	3.20
1951—January	1.387	1.66	2.39	1.86	1.39		2.66	2.89	3.17
February	1.391	1.67	2.40	1.96	1.50		2.66	2.88	3.16
March	1.422	1.86	2.47	2.06	1.63	3.23	2.78	2.98	3.22
Increase, August-February	.181	.22	.06	.52	.34	[1] .60	.04	.01	−.16

[1] Increase, September to March.

Source: Board of Governors of the Federal Reserve System, U. S. Treasury Department, and Moody Investors Service.

(*c*) *Prices and sales of long-term Government securities.*—The primary influence affecting the market for long-term Government securities in the period August 1950 through February 1951 was the tremendous demand in this period for long-term credit by non-Federal borrowers. Institutional lenders other than commercial banks, notably life insurance companies and mutual savings banks, still held as a legacy of war finance a larger portfolio of Government securities than they considered necessary for operating needs under existing conditions. The low yields on these securities were an inducement to these holders to shift into other investment forms bearing higher yields whenever the opportunity presented itself, as it did in the period under discussion.

Estimated changes in ownership of U. S. Government securities, July 31, 1950–Feb. 28, 1951

[In billions of dollars]

Investor group	Marketable securities			Nonmarketable securities	All securities
	Bank eligible, maturing or callable		Restricted bonds		
	Within 5 years	Over 5 years			
Federal agencies and trust funds	−0.4	(1)	+0.5	+1.5	+1.7
Federal Reserve Banks	+2.8	(1)	+1.1	-----------	+3.9
Life insurance companies	+.8	−0.3	−2.1	(1)	−1.6
Other insurance companies	−.1	−.1	+.2	+.1	+.1
Mutual savings banks	−.4	(1)	−.4	(1)	−.8
Commercial banks	−6.8	+.5	(1)	+.5	−5.8
All other investors	+.3	−.2	+.7	(1)	+.8
All investor groups	−3.7	-----------	-----------	+2.0	−1.6

[1] Less than $50 million.

Source: Federal Reserve estimates based on data from the Treasury ownership survey.

Under such circumstances, if sellers had had to find buyers in the market, pressures would ordinarily have been reflected in a rise in yields on Government securities (a decline in prices) to a point where the sellers (largely the life insurance companies and mutual savings banks) would have been deterred from selling, or at least where the volume of such selling would have been in balance with the buying by other investors.

Federal Reserve and Treasury buying of long-term Government bonds at pegged prices prevented such an adjustment. It made it possible for these investors to sell 2.5 billion dollars of long-term Government securities, without penalty, and in fact at premium prices, and to shift these funds into other loans and investments.

The small increase in yields on short-term Government securities in this period of exceptionally strong and inflationary credit demand was not a principal factor in the selling of long-term Government bonds by institutional investors, although it may have had some influence on the timing of such sales. Other investors, including casualty insurance companies and pension funds, bought long-term Government bonds on balance. Some investors had been investing short-term money in long-term Governments in order to get the higher rate paid on these securities rather than the lower short-term rate. Rising yields on short-term securities may have caused some of these holders to sell their long-term bonds and invest in shorter-term issues. It is not feasible to determine the total actual amount of such shifting, but it was undoubtedly small as compared with the 2.5 billion dollars of institutional selling discussed above.

(*d*) *Effect on System support policy.*—With the private demand for long-term credit far in excess of savings available for such investment in this period, it was inevitable that there would be upward pressures on long-term interest rates and downward pressures on prices of outstanding bonds. Prices of bonds were kept from declining only by very heavy support purchases by the Federal Reserve System and the Treasury. The small increase in short-term rates that occurred during this period was not the primary, or even an important, factor in the pressure on long-term rates. On the other hand, System support of long-term bond prices during this period closely limited and largely offset the potential effectiveness of other measures to restrict the availability, cost, and supply of credit, including the active use of discount policy and an upward adjustment in Federal Reserve Bank discount rates and short-term interest rates.

Some lessons from the period.—In a period in which inflationary pressures are being fed by rapid expansion of credit, especially bank credit, the Federal Reserve System needs to restrict the supply of Reserve Bank credit and member bank reserve funds in order to limit the total supply of credit. Effective limitation is not possible if the Federal Reserve is buying Government securities in order to prevent increases in either short-term or long-term yields. The System cannot prevent increases in yields in an inflationary period without feeding the inflation by creating the reserve base for a continuous expansion in the total volume of credit and the total money supply.

Adequate limitation on access to Reserve Bank credit cannot be achieved if there is to be a stair-like support given to yields on Government securities, with yields maintained by pegging operations except for intermittent and brief periods when small adjustments of predetermined size are permitted to occur. Such adjustments can be kept very small and held within the predetermined range only by System open market buying that feeds large amounts of reserve funds into the market.

In the discounting mechanism, as is explained in the answer to Question F-35, the Federal Reserve System has an instrument for maintaining a significant measure of restraint on the availability of credit and at the same time setting an upper range to increases in short-term rates at any particular time. This restraint can be achieved, even in a period when there is a substantial volume of Treasury refinancing and new borrowing, through flexible adaptation of open market and discount operations and debt management actions.

With respect to long-term yields, support of prices by the Federal Reserve in the face of heavy demand for long-term credit tends to create additional bank reserves and expand the credit and money supply, offsetting the anti-inflationary effect of restrictive action in the short-term credit market as well as that achieved by fiscal measures.

31. Describe the mechanism by which a general tightening or easing of credit, and the changes in interest rates which may result, is expected to counteract inflation or deflation. Discuss the impact on borrowers and lenders in both the short-term and long-term credit markets and on spending and savings. Indicate the effect on each of the broad categories of spending entering into gross national product. What are the (actual or potential) capital losses or gains that would be brought about by changes in interest rates? To what extent is the effectiveness of a program of credit restraint affected by or dependent upon expectations with respect to subsequent changes in interest rates? Distinguish in your discussion between small changes in rates and large changes in rates.

This question in addressed to the mechanism by which a general tightening or easing of credit can counteract inflation or deflation.

It does not deal with the many forces, other than monetary and credit forces, that cause inflation or deflation and other cyclical disturbances. Nor is it related to the forces by which tightening or easing of credit is brought about, although the nature of the forces would affect the results. In this discussion it will be assumed that the credit tightness or credit ease referred to by the question develops under conditions when primary reliance is placed on general credit measures whether or not supplemented by selective measures in a few particular credit areas. It is recognized that credit measures alone should not be relied on for achieving economic balance.

General tightening of credit restricts most directly the amount of spending which can be done with borrowed funds. Even for spending where no credit may be involved, however, credit restraint has an important deterrent effect. This effect is achieved in a number of ways. It may result from a dampening of inflationary expectations on the part of businesses and consumers. It may be due to the decline in the capitalized value of income-producing assets which tends to result from the rise in interest rates produced by a general tightening of credit. It may reflect decisions of consumers and businesses to save more, either because the return on savings has become more attractive, or because availability of credit is less certain and liquidity positions must therefore be strengthened to meet possible emergencies or to insure fulfillment of future plans.

Easing of credit, on the other hand, encourages spending with borrowed money. It also stimulates greater spending out of current income and past accumulations of funds by promoting the expectation of stronger markets for goods and services; by stimulating a rise in capital values, initially in high-grade bonds and other assets where the return is assured; and by dampening incentives of businesses and consumers to save.

The effect on the demand for credit of a tightening or an easing of credit is dependent on the existence of a fringe of borrowing or potential borrowing. That is, restraint on credit is effective on the demand side through its influence in deterring borrowers from using credit for purposes with marginal profitability or from using as much credit for other purposes as might have seemed profitable had credit conditions remained unchanged. In an inflationary period when credit is in great demand, there is always fringe borrowing. On the other hand, if an easing of credit is to stimulate borrowing, there must be a similar fringe of potential borrowing which would occur if credit were made cheaper and more readily available. Under most conditions such a fringe does exist, and an easing of credit will stimulate borrowing in amounts or for purposes that were previously not regarded as profitable, and for purposes for which credit could not previously be obtained.

This fringe of credit demand, however, may be dissipated under certain circumstances. If, in a period of boom or inflation, investment has been allowed to proceed at a pace that anticipates needs too far, the economy will be highly vulnerable and a cumulative deflation may be initiated by any of a number of factors. Many credit uses that would ordinarily have been greatly stimulated by an easing of credit may have been satiated in the boom. Expectations of other potential borrowers as to profit possibilities may have been so dampened by prevailing economic imbalance that they will not borrow, however freely credit may become available. Once such conditions have developed, the effect of an easing of credit will be very limited. The ability to combat deflation and depression with credit action, therefore, depends on the extent to which action has been taken earlier to limit credit expansion and inflation.

For expository purposes, this discussion will focus primarily on the effect of credit tightness in restraining spending. In general, easing of credit tends to have the opposite effect from that produced by credit tightening, although as has been indicated the response to easing may be much less under certain circumstances.

A general tightening of credit involves curtailment in the availability of credit relative to the demand for credit. It may develop because the supply of credit has contracted without a corresponding reduction in demand, because the demand for credit has increased without a corresponding expansion in supply, or from some combination of these developments. In an inflationary period, credit conditions will tend to tighten without an actual curtailment of credit volume. At such a time even a credit policy which merely resists satisfying fully the expanding credit demands will bring about a measure of credit tightness; to keep credit from tightening under such conditions the total credit and monetary base would have to be expanded at the pace set by the progress of inflation.

Credit tightness will be reflected partly in increased rates of interest. Perhaps its principal effect on lending, however, is through more rigorous standards used by lenders for judging the basic credit-worthiness of borrowers and for determining the size of the credit lines which may be extended. The reduced availability of funds will make lenders more selective regardless of any changes in interest rates. Credit tightness operates also through its bearish effect on expectation of borrowers, both as to profitability of investment and as to future availability of financing for later stages of the investment process, so that it makes prospective borrowers less eager to borrow and those already in liquid condition less willing to surrender their liquidity.

The extent to which interest rates may need to rise if credit restraint is to be effective, or if credit policy is not to promote inflation, depends on the force of inflationary pressures and on the timeliness of credit action to restrain them.

Effect of tighter credit conditions upon lenders

A general tightening of credit affects lenders in both short-term and long-term credit markets. In the long-term credit market the supply of investment funds is related to the volume of current and past saving. The supply of such saving is relatively fixed at any period of time and does not adjust quickly to changes in demand. In a period of inflationary pressures, however, the increased demand for long-term credit tends to spill over into the short-term credit market. Changes in the availability and cost of short-term credit, therefore, tend in this way to be transmitted in some degree into the long-term sector of the market. In addition commercial banks, which are the major lenders in the short-term area, also have some direct significance in the long-term market largely through investments in high-grade, long-term securities and real estate lending.

Commercial banks as a group can expand their credits in the aggregate only to the extent that they have or can obtain the reserves needed to support the resulting growth in deposits. The availability of such reserves is directly subject to Federal Reserve influence. Aside from the gold inflow or a return of currency from circulation, which can be counteracted by the Federal Reserve, or except for transitory factors, bank reserves can be increased by bank borrowing at the Reserve Banks or through purchases of Government securities by the Federal Reserve.

Borrowing on the part of banks is looked upon as a temporary expedient, as banks do not like to be permanently in debt. Furthermore, the Reserve Banks may even refuse to lend to individual banks which persist in lending practices which are regarded as unsound. In addition, the Federal Reserve authorities can always raise the discount rates at which Reserve Banks lend to all member banks if they consider such action desirable to limit the incentive to make use of this source of reserve funds.[54]

Individual banks can get reserve funds by selling Government securities or by permitting maturing issues to run off. As a group, however, banks cannot expand their total reserves in this way except when securities are being bought by the Federal Reserve Banks. Unless the Federal Reserve is buying securities, for whatever reason, and thereby supplying reserves, reduction in security holdings by one or more banks will normally draw reserves from other banks and no net addition to reserves will occur. An attempt by banks as a group to obtain additional reserves by selling securities, or by allowing maturing issues to run off, is likely to result in lower prices and higher yields on short-term securities. At the lower prices and higher yields, Government securities will be more attractive to nonbank investors, which may consequently be induced to invest some temporarily idle deposit balances. The shift in Government security ownership to nonbank investors and the making of loans by banks with the proceeds will also shift the ownership of the deposit supply, but it will not increase total bank reserves to permit deposit expansion. Some additional borrowers will be accommodated by banks but there will be no further deposit expansion.

At the same time as a related factor of restraint on the growth of bank reserves, banks will become more reluctant to reduce their holdings of Government securities at lower prices and higher yields. Some banks may continue to reduce holdings, but others will stop or may buy, and in the aggregate the Government security holdings of banks will tend to stabilize. This development is brought about in several ways. Banks and other potential lenders are reluctant to sell securities at a book loss, and as the book loss becomes greater this reluctance deepens. As yields rise on Government securities, this development and accompanying changes in the credit outlook make the liquid asset positions of banks less satisfactory to bank management; their holdings of liquid assets, which had previously been viewed by management as adequate or even more than adequate, come to be viewed with more concern. They can no longer count with certainty on a continued ready availability of reserve funds. The result is an enhanced

[54] The role of borrowing from the Federal Reserve is treated more fully in the answer to Question F-35.

unwillingness of bank management to reduce holdings of Government securities for the purpose of making more loans. Even when securities mature and are refunded by the Treasury, banks in general will not necessarily let them run off or sell their rights into the market, since the banks holding them or other banks will be attracted by the higher coupon being offered as well as interested in maintaining or increasing the liquidity of their investment portfolios. The amount of reduction in bank liquidity which will accompany a tightening in credit conditions will depend in part on the maturity distribution of bank portfolios of Government securities. This also will influence the extent to which banks may feel under pressure in such circumstances to maintain or increase their liquidity position, perhaps expanding their holdings of Government securities rather than loans. The maturity distribution of bank holdings of Government securities as well as the volume of such securities held by the banks is affected to an important degree by past and current debt management policies of the Treasury.

Tightening of credit will at the same time modify in a restrictive direction the lending practices and standards of bankers. This will reflect the fact that there is less credit available for lending and also the moderating influence that the change in the credit climate will have on expectations of bankers as to the general outlook for business and commodity prices. Applications for loans, particularly inventory loans, will be more carefully screened. Those businesses which obtain credit for purposes of inventory accumulation will be under constraint from their bankers to limit such activity closely to actual requirements. Banks will tend also to bring pressure on many previous borrowers to repay inventory and other credits, which in turn will have a dampening effect on markets. In general, bankers will be alert to find reasons for refusing credit requests or not meeting them fully, rather than anxious to promote credit business wherever they may find it.

Institutions operating primarily in the long-term credit market, such as life insurance companies and mutual savings banks, are affected in much the same way as commercial banks by a tightening in credit and the accompanying increase in the rate of interest. This has been particularly true in recent years because of the large portfolios of Government securities accumulated by these institutions during the period of war finance. By selling Government securities they can acquire funds for expanding mortgage loans and purchasing corporate securities in excess of the new savings funds available to them.

In a period of tight credit, however, they have difficulty in finding ready buyers for securities except at a loss, which they hesitate to accept. They also become more interested in holding the more liquid types of assets because of the decline in the market value of their entire investment portfolios, because of the general uncertainty concerning future developments, and because the higher rates on these liquid assets come closer to meeting the contractual obligations of these institutions to their members and policy holders. The securities which best fulfill this need for liquidity in earning assets are Treasury and other very high-grade securities; this is true because, as a matter of historical fact, prices of such securities have proved considerably less subject to violent fluctuations than prices of other securities. In a period of tightening credit and rising interest rates, institutional lenders will generally exercise greater caution in making real estate loans or purchasing private securities and will develop more hesitancy in accepting marginal applications for credit.

Nonbank institutional lenders, particularly insurance companies, arrange in advance for the placement of their funds through commitments to lend.[55] These agreements make it possible for potential borrowers to proceed with projects which they might not undertake without assurance of financing on satisfactory terms. At times of active demand for long-term credit, lenders might be willing at a given time to sell Government securities even at a loss in order to make loans on which the interest return is attractive. They might also be willing, moreover, to commit themselves for the future to lend in excess of the funds they expect to have available from new savings and loan repayments if they are certain that interest rates will not increase and that prices of Government securities will not decline further. They will hesitate to do so, however, if they are uncertain as to the future course of interest rates and the possible losses they might later sustain by selling securities when the time comes to take up the commitment. As a result, some proposed projects requiring long-term credit will be refused a financing commitment.

Where intermediaries are important in the money and capital market, their activity may be of considerable importance in restricting the raising of funds by borrowers. Investment banking underwriters are particularly sensitive to changes in interest rates because they customarily borrow such a large proportion of the funds needed to carry securities in the process of distribution. They would incur large losses in a period of rising interest rates if they were to hold a large portfolio of securities which could be disposed of only at a loss or which otherwise would continue to be carried on borrowed money. Thus they may be expected to discourage security flotations while interest rates are adjusting to higher levels.

Effect of tighter credit conditions upon borrowers

Restraint on borrowing exerted by tightening of credit results in part from increased difficulty of finding lenders and obtaining loans, in part from higher interest cost, and in part from curtailment in demand for credit due to changed expectations and greater uncertainty about future developments.

The sensitivity of borrowers to changes in the rate of interest varies widely. In certain fields of long-term investment, such as housing and public utilities (which are large and important fields), interest costs are particularly significant, and a comparatively small increase in interest rates can have a substantial effect in decreasing or postponing the demand for capital. Even in other fields where the rate of interest plays a less important role in costs, fringe borrowers may still be deterred from borrowing in case interest rates rise, while other borrowers may decide to get along with a smaller investment in inventory or in plant and equipment. The higher the long-term rate becomes, the more likely becomes the expectation that this condition is temporary and the more likely will be the tendency for long-term bor-

[55] In recent decades the flow of savings into savings institutions has been increasing rapidly and the size of the investment problem of these lenders has grown accordingly. In order to assure the ready placement of funds regularly becoming available for investment from new savings and from repayment of old loans, the major savings institutions have developed techniques for committing their funds in advance to corporate, mortgage, and other borrowers. This is discussed in more detail in the reply to Question F–34.

rowers to postpone investment outlays in the expectation of borrowing later at a considerable saving in interest cost.

The effect upon the borrower of the rate of interest considered as a cost of current investments, as described above, is far from being its only effect. An increase in the rate of interest has a further influence, and an important one, in that it reduces the money value of existing assets.[56] Income earning assets are valued by capitalizing the expected income at the going rate of interest with due allowance for risk. When interest rates rise, the market value of such assets tends to decline, unless actual or expected earnings rise at the same time, since their earnings are capitalized at a higher rate of interest. This results in a basic change in the relationship between prices of existing assets and prices of new producible wealth which, together with changes in expectations as to profits and risks due to the changed credit and monetary situation, shifts the balance of entrepreneurial decisions toward holding or buying old assets, and adapting old assets to new uses, rather than buying new ones whose production would involve adding to the demand for materials and labor. Values of fixed-interest-bearing securities also decline as market interest rates rise, a development which reduces the liquidity positions of their holders and tends to discourage spending, both with borrowed funds and otherwise.

Borrowers in the short-term market may be greatly influenced by changes in credit conditions. Business inventory accumulation is normally financed in substantial part by credit. When businesses have been building up inventory positions, a tightening in the credit situation will affect the climate of business expectations and tend to remove some of the incentives for these accumulations. Uncertainty with respect to future credit conditions, moreover, increases the possibility that inventory holdings may have to be liquidated under unfavorable market circumstances, and deters particularly inventory accumulations of a purely speculative variety.

Use of credit by consumers is not ordinarily subject to restriction directly through advances in interest rates, since changes in market rates are not reflected proportionately in the retail credit charges to consumers. General credit tightness tends to be transmitted to restraint on consumer credit, however, through its influence on stricter lending standards applied by consumer-credit-granting institutions. Because of the nature of the consumer credit market, however, this is a field where selective credit measures can be helpful in supplementing general instruments of credit policy.

Mortgage borrowing for house purchases may be considerably affected by increases in interest rates. Such borrowing is typically long-term and on an installment-repayment basis. An increase in the

[56] In a highly developed economy such as the United States, the volume of accumulated capital assets is very great in relation to current income. Small percentage changes in the value of such assets involve large dollar amounts. In a recent study by Raymond W. Goldsmith, which is now in process of publication, it is estimated that for the 145-year period 1805–1950 the average yearly rate of growth of reproducible tangible wealth in the United States was about 4¼ percent, or about 2 percent on a per capita basis. At the end of 1948 reproducible tangible wealth owned by individuals, businesses, and farmers was valued at approximately 600 billion dollars. Although not all of this represents assets whose value is directly affected by changes in interest rates, the figure serves to give some idea of the magnitude of reproducible assets involved. In addition, values of income-producing lands are affected, as are values of negotiable claims not represented by real assets. The study is part of a comprehensive inquiry into savings and investment in the American economy, financed by a grant of funds from the Insurance Companies Investment Research Committee, with the joint participation of the two associations of life insurance companies.

interest rate, which will add to the monthly mortgage payment, will tend to improve the attractiveness of renting, rather than buying, housing. Total spending for new houses will thus be reduced as some buyers are discouraged altogether and many others are induced to buy cheaper houses. The size of the monthly payment on a mortgage, however, reflects the length of the borrowing term as well as the interest rate. By lengthening the period of mortgage repayment it is possible largely to offset the restrictive effect in the housing sector of an increase in interest rates. Selective credit measures that limit directly the maturity terms on mortgages, therefore, are also useful supplements to general instruments of credit restraint.

In the area of stock market credit, the extent to which credit demand may be influenced by changes in interest rates depends largely on the character of developments in the stock market. In a generally stable market, credit tends to be used to finance operations of regular investors and professional traders where the transactions are substantial in size but where only small unit profits may be expected. Credit demand for such transactions may be sensitive to higher interest rates, since the increased cost may make certain transactions unprofitable. On the other hand, when the stock market is buoyant and speculation is widespread, the expectation by the general public of quick capital gains may be so strong as to make borrowing costs a matter of distinctly secondary importance. In such circumstances, the selective credit controls establishing minimum margin requirements have an essential role in achieving restraint in this credit area.

Effect on saving

To trace properly the effects on saving of a tightening of credit and the accompanying changes in interest rates requires a multilateral approach. It is necessary, to begin with, to note some facts about the term "savings" as this term is generally used in economic discussions. First of all, saving may be done either by individuals (including unincorporated businesses) or by corporations. Second, and more important, the aggregate volume of either individual saving or corporate saving in any period is a total of the experiences of all who saved on balance in the period, minus the total of those who dissaved. Third, there are many kinds of savings, or rather many uses of savings, and they are of varying significance from the standpoint of inflation or inflation restraint. A discussion of the effects on saving that flow from credit restraint and interest rate increases must consider each of these points.

With respect to the volume of individual savings, credit tightness and a rise in the rate of interest may be expected to set up several cross currents. Some individuals have savings programs which have been planned at least in part with the view to obtaining a certain size annuity for retirement. As long-term interest rates rise, the amount of saving required for such an annuity declines. Such savers would be able to reduce their saving and still meet their needs, should they choose to do so. On the other hand, there are individuals who are encouraged to save by the more attractive return offered for savings. It is not easy to establish where the balance of these motivations may be.

It is not necessary, however, that those who save increase their total saving in order to have an increase in the aggregate of personal saving. An increase in the aggregate of saving may be achieved by a reduction in the volume of dissaving—that is, by a reduction in the extent to which consumption is financed by using past savings or by borrowing.

Here the effect of a tightening credit policy is clearer. First, since credit is less readily available, the amount of dissaving with borrowed funds will be reduced from what it would otherwise have been. Second, dissaving through the use of previous savings will also be discouraged in varying degree depending on the form in which such savings are held. For savings held in marketable bonds and many other noncash assets, market values will be less because of the general rise in interest rates. The sacrifice of principal which would be involved in liquidation of these savings will deter dissaving of this kind. Dissaving through the use of past savings accumulated in savings accounts or held in other liquid forms would be less penalized, except that for some types the current interest return would rise with the general advance in interest rates and thus the accumulated savings would be more attractive to keep.

Dissaving of any kind would be discouraged, and saving encouraged, by the fact that action to restrict the availability of credit was being taken to restrain inflation. There would be less incentive to hedge against inflation by buying in anticipation of rising prices since the fact that measures were being taken to tighten credit would in itself reduce the likelihood of inflation and lessen the motivation for individuals or businesses to buy goods in advance of needs as protection against rising prices. Also, expectations as to future income, other than from interest, would tend to be less optimistic and saving would be encouraged as a matter of prudent household management.

A business corporation saves when it pays out less in dividends in any period than it makes in profits. Dissaving occurs when losses are sustained or when more is distributed in dividends than is made in profits. Total corporate saving over any period of time is equal to the algebraic sum of all such saving and all such dissaving. When credit is less readily available, corporations which have programs for expanding plant and equipment are likely to show greater caution in their dividend policies in order to insure that funds will be available for such outlays. Other corporations, because of the uncertain availability of credit, will be more inclined to hold larger cash balances rather than increase dividends—on the chance that an emergency or a profit possibility requiring cash might develop.

Savings can be held or used in many different ways. They may be invested in capital assets, either directly such as in housing or personal business enterprise, or indirectly such as through the market for corporate securities. Savings may be held in the form of accumulated cash balances in demand deposit accounts or as currency holdings. They may be channeled into savings institutions through increased ownership of dollar claims such as savings deposits or shares, or through the building of equities in pension funds, annuities, or life insurance. Savings may also be kept in savings bonds or other kinds of Government securities.

The form in which savers wish to hold savings, current or past, is of critical importance in the inflation or anti-inflation picture. Savings invested in newly produced real assets such as housing or inventories do not have the anti-inflationary significance of savings held as dollar claims in savings deposits or Government bonds. A policy of credit restraint can influence the decisions of many savers, both individuals and businesses, to invest new savings in such dollar claims and to keep old savings in that form. Yields on these investments tend to become more attractive. At the same time the desire to invest in goods so as to beat price increases is reduced because the expectation of price increases, particularly of capital goods, is lessened. Holders of certain liquid savings, such as bonds, are also discouraged from liquidating these to invest elsewhere by the fact that the liquidating price of the bonds has declined with increasing interest rates. Many savings institutions, moreover, require certain minimum returns from their investments to meet contractual obligations, and to the extent that these returns can be obtained from investments of lesser risk they will hold more of these assets and less of the more risky ones. A small rise in yields on Government bonds may thus be an important anti-inflationary influence even though yields on other investments rise as much or more.

Accumulations by individuals of currency or demand deposits over a particular period may represent genuine personal savings, or they may be additions to holdings of cash working balances. They are thus a form of personal saving of uncertain economic significance. Such funds may actually be in the process of active current use, passing from one holder to another, thus increasing inflationary pressures. Or they may be held awaiting disbursal, heightening the threat of immediate inflationary pressures. If the funds are held idle, however, and if they do not cause their holders to spend more freely out of future income or past savings, such accumulations are at least temporarily anti-inflationary. It was the experience of World War II and the postwar period, however, that funds accumulated in the form of demand deposits and currency tend to return to the active money stream whenever attractive spending opportunities arise, and may become highly inflationary. Although genuine savings held in this form are anti-inflationary in the short run, they may complicate the problem of avoiding inflation over an extended period of time.

Effect on broad categories of gross national product

The following are the broad categories of gross national product, with an indication, for each category, of the initial and direct effect of a tightened credit policy on the spending for that category.

Gross private domestic investment.—(1) New construction: A large fraction of new construction is ordinarily financed through long-term credit. The volume of these expenditures is thus subject to substantial direct influence through credit measures. This is true of outlays for housing and for business construction, but perhaps most particularly for housing. In addition to the direct restraint through reduced credit availability, the effect of rising interest rates on capital values and on profit expectations is a restrictive factor in the construction area.

(2) Producers' durable equipment: These goods are frequently bought on credit and reduced availability of credit would curtail buying. For some of these goods the credit period is typically long and the interest rate is an important consideration. This is true for heavy equipment, such as machinery for public utilities. The effect of ris-

ing interest rates on capital values is also of some significance here. For some other equipment types, credit is usually shorter-term, and here the factor of interest cost may be less important, although less ready availability of credit will be a deterrent.

(3) Change in business inventories: Reduced availability of credit is of considerable importance in inventory investment. Much of this is done on credit, and there is usually a close business relationship between bankers and such borrowers. Changes in the credit climate would quickly be reflected in bankers' advice to their credit customers to proceed cautiously. In addition, the mere existence of a policy of credit restraint would reduce the expectation of rapid price advances that encourage inventory speculation.

Personal consumption expenditures.—(1) Durable goods: These goods are frequently bought on credit, and limitation on the availability of credit would reduce such outlays. Interest costs, however, would be of relatively little significance where credit is available. For this reason, selective credit measures which prescribe minimum down payment and maximum maturity terms are useful supplements to general credit instruments in this credit area. The existence of credit tightness would lessen anticipatory buying either on credit or with cash, since it would weaken the expectation of rapid price increases.

(2) Nondurable goods: Credit is not a key factor in the purchase of these goods, but credit restraint may have some indirect effect by making it necessary for consumers to use more cash and less credit for durable goods purchases, thus curtailing the money available for spending for other purposes. Credit policy would also have some influence through its encouragement to saving, which would presumably reduce buying of these as well as other goods, and through its effect in reducing the expectation of price increases which would lessen advance buying of goods.

(3) Services: Credit tightness would have relatively little effect on spending in this area, except indirectly in ways similar to the effect on spending for nondurable goods.

Net foreign purchases.—A restrictive credit policy would tend to reduce the dollar volume of United States imports. Effects upon exports would be mixed. To the extent that domestic demands were restrained, prices of some United States materials and products might become attractive to foreign buyers and stimulate exports. On the other hand, foreign purchases might be reduced if short-term credit or long-term borrowing in this country were restricted and alternative means of financing such payments were unavailable. On balance, the over-all short-run effect on United States export-import trade would be difficult to predict. International movements of liquid funds in response to interest rate changes or to changes in the outlook for stability in the United States economy might be substantial and would tend to be reflected in a flow of gold to this country, a development which would ease the credit situation somewhat unless offset by other factors.

Government purchases of goods and services.—Financing cost and the general availability of credit, particularly in the long-term capital market, has an influence on the timing of State and local government outlays which require credit. The outlays of the Federal Government, however, are ordinarily not directly influenced by the availability of credit.

General comment.—The effects on spending discussed above are the initial and direct results of credit tightness. These initial curtailments in spending, however, have repercussions on future outlays which may be of even greater importance. The initial effects will mean that less is paid out as money income to consumers, and that accordingly there is less income to spend in succeeding periods for goods and services (what economists call the multiplier effect). Reduced spending for consumer goods, and other finished products, has in turn a contractive effect on the demand for the machines to make them that tends to be several times as great as the original reduction in consumer demand (what is called the deceleration effect).

Another important consideration is the alternative to credit tightness in the face of strong demands for credit. To avoid such tightness, it would be necessary to supply additional funds to meet all demands even though they might be excessive from the standpoint of the maintenance of stable economic progress. In general, an economy will be richer and more productive in the long-run future to the extent that it can afford to extend the processes of production by capital expansion. In a free enterprise economy, however, where decisions as to how incomes shall be used are made by the individuals receiving incomes, rather than dictated by the state, the extent to which it is possible to devote resources to capital expansion without generating inflation depends on the combination of individual decisions to save or dissave—on the aggregate volume of saving. If savings are very large, as they ordinarily are in this country, capital expansion is possible in substantial volume. There is nevertheless a limit to such expansion which is set by the savings of the people. This limit can be exceeded only at the cost of inflation unless the extra expansion is financed out of taxes or out of additional savings created by extending the scope of direct controls exercised by the state to prevent free choice in the use of income.

Influence on capital losses and capital gains

The influence of tightening or easing credit on changes in capital values, having already been brought out in the preceding discussion, will be discussed only summarily here.

All income-yielding assets are valued on the basis of their expected returns, capitalized at the current rate of interest with appropriate allowance for risk. The value of all income-yielding assets thus tends to decline when the rate of interest rises and to rise when the rate of interest declines. This is true most obviously of prime risk, fixed-interest-bearing securities, the value of which changes only with changes in the rate of interest; when the rate of interest increases, the value of such securities held by investors correspondingly declines. The effect of an increase in the rate of interest on the value of securities or other income-yielding assets of lesser grade, however, can be even more marked than on prime securities. With the interest increase there may be an induced change in economic expectations affecting the general appraisal of the risk position of these assets; this could cause values of the more speculative assets to show a considerably further decline than would result from the change in the capitalization factor alone.

Institutional investors hesitate to sell securities at a capital loss. Moreover, the decline in the present value of their entire portfolio coupled with uncertainty concerning future developments increases the demand for the most liquid securities. This induces a demand for Government securities as compared with other assets and, especially on the part of commercial banks, a preference for short-term compared with long-term securities.

Historically, Government securities have had a broad market and their yields have tended to fluctuate less than those on other securities, with the consequence that for providing liquidity to meet emergency needs Governments are superior to other securities. The extent of potential capital loss is considerably less for short-term than for long-term securities. Thus an increase in yield from 2½ to 2¾ percent on a 20-year 2½-percent security involves a decline in price from 100 to 96⁵⁄₃₂; an identical increase in yield on the same security, 1 year from maturity, would involve a decline in price only from 100 to 99¾.

In a period of uncertainty, therefore, investors generally tend to prefer short-term securities. For institutional investors, the strength of their preference will depend upon the character of their liabilities and their needs for income. The investment preference of commercial banks, whose liabilities are mainly demand and short-term deposits, will particularly shift to shorter-term issues in a period of uncertainty.

As for borrowers, the fact that the value of existing income-yielding assets declines when the rate of interest rises tends to cause potential borrowers to become more cautious in their activities, such as by curtailing their borrowing and their dividend distributions.

A decline in the rate of interest has the opposite effect upon capital values. The value of securities held by investors increases. If investors sell Government securities to raise funds, they can sell them in many instances at capital gains. Moreover, the value of their entire portfolio increases and all securities attain a higher degree of liquidity. Hence investors feel less need for the most liquid securities. There is also an appreciation in the value of assets of borrowers and others. People then tend to be less cautious. Businesses are more willing to disburse dividends and to embark upon programs involving borrowing and commitments of future interest payments.

The effects of the changes in capital values by far exceed the importance of the actual transactions in securities. A decline in price reduces, and a rise increases, the market value of all securities held by investors. These changes in values, therefore, influence the behavior of security holders even if no immediate security transaction are contemplated.

Magnitude of interest rate movements

The impact of credit tightening at any given time, and in particular the extent to which interest rates may rise under a program of credit restraint which is adequate to cope with a given inflationary situation, will depend on the entire economic background at the time. To depict and comprehend that background calls for careful consideration of many questions. How strong are the inflationary pressures? By what forces are they being generated? How extended or overextended are the credit positions in critical sectors in the money market? How extended or overextended is the underlying economy itself? How optimistic is the climate of business expectation? And always, in appraising the probable response of interest rates to a general tightening of credit, one also needs to take into account the established general organization of finance and the investment and operating experience of the institutions which constitute this organization. Under certain circumstances credit and monetary measures involving only very minor changes in interest rates would be adequate to restrain inflation; with another background effective credit and monetary policy would require action resulting in more pronounced changes in rates.

The responsiveness of the economy to credit and monetary action will depend in part on the habits and patterns of financial administration built up over the preceding months and years. Restrictive action, for example, will tend to be effective with relatively small increases in interest rates if existing interest levels had prevailed for some period of time before the action. Under these circumstances, institutional investors will have developed patterns of doing business which are predicated on the assumption that interest rates will continue to be substantially stable and that consequently they can liquidate securities readily and without significant loss. To them and to a great many sectors of the economy the tightening of credit conditions will introduce new problems of liquidity and will bring about a prompt retrenchment in activities, including especially their forward commitments. In the light of extensive past experience, uncertainty regarding future interest-rate increases will promote caution so long as inflationary pressures continue to be threatening.

The absolute level of interest rates prevailing at a given time and the range of variation in the structure of interest rates are other factors influencing the extent to which interest rates may move with a given credit action. When interest rates are very low, a small *absolute* change may represent a very substantial *percentage* change. In the effect of an interest change on capital values, it is the percentage change that is especially significant. For example, in an economy where prime long-term investments are capitalized on the basis of a 2½ percent rate, a given absolute increase in rates would have a much more depressing effect on capital values than in an economy capitalized at 4 percent. Also, if the spread between the rate on prime paper and the rates on secondary grade credits has been small, the impact of a given increase in prime rates on capital values will be carried more quickly throughout the entire credit market than if a wider spread in rates had prevailed.

The effect of a change in interest rates depends also on the magnitude of the total volume of marketable assets of the types whose market prices vary inversely with the interest rate. The larger this volume is, the greater and more immediate will be the impact of a given interest rate change on the entire economy. On balance, developments in the American credit market in the past 25 years, including particularly the large expansion in marketable public debt, have worked to increase the importance of marketable assets whose prices move promptly with interest rate changes.

Particular institutional arrangements and circumstances in the credit market can greatly influence the responsiveness of the economy to a credit action and the size of the interest rate change a particular credit action will evoke. In 1928 and 1929, for example, speculative buying raised stock prices to levels which made equity capital available to corporations on more attractive terms than debt capital. Although the cost of debt financing (the long-term interest rate) was increasing, the effects of this increase were counterbalanced by the effect of speculative conditions on the availability of equity funds. Business financing in this period relied heavily on the equity market. The stock market boom in those years, in turn, was financed heavily in the brokers' loan market by *nonbank* credit (loans to brokers and dealers for others), and interest rates of 9 percent or more in this market did not prevent a large volume of borrowing for speculation in stocks. Under these circumstances, credit actions taken to restrict the general availability of credit could not readily be made effective in curtailing an unsustainable speculative boom. In the downturn that followed, even with a decline in long-term interest rates, the terms of long-term financing were less attractive to corporations than they had been in the boom. Debt financing, although cheaper than it had been before, was still considerably less attractive than the equity financing that had been available to many prime borrowers in 1929. Legislation which authorized the Board to regulate through margin requirements the use of credit in the stock market was designed to prevent a repetition of this situation.

Under certain quite different circumstances credit actions reflected in rising interest rates may have sharply restrictive influence before the interest rate rise has been large. For one example, when business financing is being done in large volume in the bond market, investment underwriters will need to carry a substantial inventory of bonds. With these institutions the ratio of capital to inventory is typically small, and their operations are heavily dependent on the use of short-term bank credit. Moderate increases in interest rates would put their capital positions in jeopardy, threaten their credit-worthiness, and cause them to reduce the volume of new flotations of securities which they would be willing to undertake.

For another example, in the spring of 1951 the mortgage market was particularly sensitive to a moderate increase in long-term rates. This was because major lenders were over-extended in their lending commitments. The change in the credit situation and the uncertainty precipitated with respect to future interest-rate and security-price levels caused these institutions to reduce sharply their commitment activities in mortgage financing and to some extent in other financing. This brought about some limitation on the volume of new investment which at that time was running in excess of the currently and prospectively available funds of these lenders.

Effect of expectations of future changes in interest rates

The effectiveness of a program of credit restraint is conditioned by expectations of the future course of interest rates as well as by whatever changes in rates have already occurred. Rising interest rates affect adversely the liquidity position of the lender by reducing the market value of his assets. Thus, the lender is less willing to lend when rates have been rising and when there is at the same time a high degree of uncertainty concerning rate movements in the future. Investment banking houses, moreover, will tend to discourage flotations in such a period. In this assumed situation the long-term borrower might be willing to anticipate his future financing needs, but even if he were, he would be limited by the unavailability of credit.

It is important in an inflationary period that there be a high degree of uncertainty as to the future course of interest rates and as to the availability of credit. At such a time, the liquidity of the economy should be reduced and the desires of businesses and individuals to hold liquid assets should be increased. A widespread feeling that interest rates are frozen works against these objectives. It imparts a greater degree of liquidity to all assets extending to second-grade securities and even to real estate and encourages holders to act as though these assets were substitutes for cash. At the same time it makes business and individuals less interested in holding highly liquid assets by removing some of the major reasons for doing so—for example, in order to be independent of changes in the availability of credit and to be in a position to make favorable investments in securities or other assets as their prices shift with changes in interest rates. On the other hand, a widespread expectation that interest rates may change, and an uncertainty as to which way or how far they may change, results both in a decline in the total liquidity of the economy and in an increase in the desire to hold liquid assets.

32. How rapidly and to what extent would you expect the volume of bank loans to respond to measures of general credit control under present conditions?

The general credit instruments operate impersonally and pervasively throughout the whole financial market mechanism. They function by restricting or facilitating credit transactions that are, in an economic sense, marginal. They affect primarily "fringe" loan transactions about which there is some question as to whether they will or will not be made. They also affect the volume and terms of loans that continue to be made. Since the general credit instruments affect the cost and profit conditions under which lenders and borrowers operate, their effects are spread through the economy by adjustments decided upon by many individual lenders and also by borrowers in the light of changed conditions rather than as a result of adjustments imposed by Governmental regulation.

Advance judgments as to how rapidly and to what specific extent the volume of bank loans will respond to measures of general credit restraint have to be based upon a comprehensive and integrated analysis of the over-all business, Federal budget, and credit and monetary situation. This needs to include consideration of the effectiveness of other credit measures, e. g., selective regulations and voluntary credit programs, as well as a broad evaluation of the effectiveness of such other Governmental control measures as are in operation.

Among the more critical financial factors influencing the rapidity and extent of bank loan response to general credit instruments are: (*a*) the composition and intensity of the demand for funds; (*b*) the liquidity and risk position of the various types of lenders; and (*c*) the general climate of business and financial expectations. Because the relative importance of these and other factors differs from time to time, a given use of the general instruments will have varying effects and time lags under differing sets of conditions.

Use of general credit instruments requires careful and continuous appraisal of current developments and immediate prospects, and such broad appraisal of the longer term prospects as may be feasible. The instruments should be applied flexibly in response to developing economic conditions.

That the degree of application needed to meet a given situation of inflationary credit expansion varies under different conditions can be illustrated by developments following March 1951. At that time, when reliance on general credit instruments was increased under the Treasury-Federal Reserve accord, various other anti-inflation controls were in operation. Selective restraints on consumer, real estate, and stock market credit were in effect, and a program of voluntary credit restraint was being initiated. Direct price ceilings and wage controls had recently been imposed. Nevertheless, the expectation was generally held that further rapid inflation was very likely, and private purchases of goods were in excess of current needs. In this situation, it was possible for general credit measures to contribute significantly to a moderation of inflationary pressures with relatively small repercussions on interest rates in the market.

The first effect of the application of general credit instruments that followed the accord was a change in the climate in the money market. It was registered in an abrupt shift in expectations as to further depreciation in the value of the dollar. Accordingly, public discussion of the relative merits of various hedges against inflation became less pronounced. There was also a change in the evaluation by observers abroad of prospects for the dollar, and a cessation of the gold exports which in preceding months had attracted considerable public attention.

In the capital market, institutional investors could no longer count on pegged prices for Government securities. This dampened their disposition to make advance financing commitments in excess of accruing funds and thus reduced the availability of capital from these large suppliers. Absorption of new security issues in the open market slowed down for a period and a number of prospective issues were withdrawn or postponed.

As always happens when an inflationary spiral is broken, the distortions in the economy brought about by the inflation operated as a potent moderating factor as soon as the climate of expectations changed. Business decisions ceased to be dominated by the conviction that prices would continue upward under the impact of defense expenditures; instead, decisions became influenced by the possibility of a leveling off in civilian demand and declines in prices. Succeeding months were characterized by sustained high level activity relatively free of further inflationary pressures.

In assessing the effectiveness of general credit instruments with respect to bank lending under present conditions, it is important to take special account of the changes which have occurred in the liquidity and risk position of banks and other financial institutions since Korea. These institutions have increased substantially the proportion of their assets in the form of loans and investments other than Government securities. This increase, together with the change in Federal Reserve policies, has brought a marked reduction in the operating liquidity positions of banks and other lenders, a condition that makes the banking and financial system more responsive to general instruments of credit and monetary policy.

33. Compare the applicability of general credit and monetary measures and the resultant increases in interest rates as a means of restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future, (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future, (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and (*d*) under conditions of total war.

General credit and monetary measures are effective means of restraining inflation. Such measures have to take account of, and be varied under, differing conditions of Treasury finance. Restrictive credit policies do not mean, however, that the Treasury will be unable to refund or to borrow. In periods of credit stringency when interest rates tend to rise and there is heightened uncertainty regarding future credit developments, the demand for liquidity increases and Government securities become more attractive in the market relative to other outlets for funds. At such a time there is a widening in the spread between interest rates on Government securities and on other credits. Such a widening reflects a greater investor preference for Government securities, and this can be used to advantage by the Treasury through selection of the terms and provisions of new issues offered.

General credit and monetary measures taken to restrain inflation have no immediate effect on the cost or ease of Government financing when the Treasury is not expected to be a large borrower in the foreseeable future either for refunding or for additional funds. However, they do affect the price of existing marketable Government securities. In view of the large volume of such securities outstanding and their widespread ownership, consideration needs to be given to assure a reasonable degree of orderliness in the Government securities market. As explained in the answer to Question C–18, this does not mean that the prices of the securities must be supported at some fixed level. In fact, such support would negate the effectiveness of general credit and monetary measures in restraining inflation.

When general credit and monetary measures are used to combat inflation at a time of large-scale Treasury refunding operations, special care must be taken, in order to assure successful refunding without support, that the new securities bear interest rates, maturities, and other characteristics that conform to general market conditions and that appeal to nonbank investors. When the outlook is inflationary, it is important to encourage the holding of outstanding securities by nonbank investors and to place refunding issues with such investors rather than with banks.

The availability of nonbank funds for investment in securities—private or government—is constantly shifting, and there is also a continuous shifting going on in the availability of funds as between the different investor groups. This provides an opportunity to devise new security offerings or refunding issues so as to attract these available funds. The need for alertness to the availability of funds exists whether economic trends are inflationary or not, but the need assumes special importance under inflationary conditions.

During Treasury refunding operations, settled conditions in the market for the exchanged Government securities are needed to facilitate their shift among holders and to assure a large exchange. Some holders will want to redeem their securities for cash and some investors will want to acquire new securities. Unless existing holders who want cash can sell their maturing issues at a favorable price during the refunding period, they will wait for cash redemption at maturity and thus will reduce the proportion of exchanges. Success in refunding, therefore, requires an exchange offering that is attractive to the market in comparison with alternative investment opportunities.

In a period short of total war the Treasury should not have to be a large net borrower on the ground of inadequate taxpaying capacity of the public. An economy as rich as this country's should be able to finance the current defense program on a pay-as-you-go basis. Even at the peak of such expenditures as now planned, they are expected to account for no more than one-fifth of an expanded national product.

In case temporary Government deficit financing is required while inflationary pressures exist, the new securities should be placed with nonbank investors. Genuine savings rather than money created through bank purchases of Government securities should be drawn upon to finance such deficits. Credit and monetary policies during such periods should be aimed at minimizing the expansion of credit for nonessential private purposes.

In war as in peace, the volume of credit and money must accommodate the requirements of an expanding economy. During war, special needs for bank credit and monetary expansion arise because of pressures to accelerate over-all expansion and because of the urgency of costly transition to concentration on armament output. At the same time, it is of critical importance that credit and monetary policy be used to help finance a war in such a way as to limit, as much as possible consistent with output goals, the increase in the credit and money supply. If deficits are kept to a minimum and borrowing accomplished through savings rather than through bank credit and monetary expansion, the degree of monetary pressures on prices and their disruptive effects on wartime economic controls can be substantially lessened during the war years, and in the peace that follows there can be a minimum inflationary carry-over from war finance.

34. To what extent is the demand for Government securities and other high-grade, fixed-interest-bearing securities by nonbank investors influenced by (*a*) the current level of interest rates, (*b*) expectations with respect to changes in interest rates, and (*c*) other factors?

It is useful in answering this question to separate nonbank investors into groups, since the factors which influence investment policies differ widely among the various categories of investors. Nonbank investors may be classified into six groups on the basis of investment characteristics, as follows: (1) life insurance companies; (2) mutual savings banks, savings and loan associations, and casualty insurance companies; (3) pension funds, both public and private; (4) nonfinancial corporations and State and local governments (except pension funds); (5) individuals, private trusts, endowment funds, and miscellaneous investors, and (6) foreign investors.

The investment market as a whole is so large and complex that it is only by taking up each category of investors by itself that useful generalizations can be reached. Even within each category, there are many intricacies with which the analyst must reckon. The investor or investment manager, in making his decisions, has many aspects of his investment problem to weigh and to consider, and he may be influenced as well by considerations which are not directly related to the investment problem itself. This discussion, however, will consider interest rates and certain other investment factors that influence particularly the demand for Government securities by each category of investors. It will not undertake to discuss all factors that might conceivably have a bearing on investment decisions.

Life insurance companies.—Life insurance companies operate under fixed contractual obligations at stated rates of interest and investment income must be sufficient to cover these liabilities. Increases in total assets have been almost uninterrupted, and the magnitude of this growth is subject to a fair degree of predictability. The inflow of new funds under most circumstances is more than sufficient to cover current outflows of funds and administrative expenses so that liquidity needs are at a minimum.

In addition to the steady increment of new funds, investment managers of these companies are faced with a tremendous reinvestment problem due to the maturity or regular amortization of many of their investments as well as to the receipt of income on outstanding investments. The combination of these problems has led to some far-reaching changes in the long-term investment field, the most notable of which are the development of the forward commitment technique and the growth of private placements, particularly for business borrowing.

The life insurance business is highly competitive. The competitive features include the basic soundness of the company, salesmanship, and personal service as well as the net cost of the insurance contract. All of these are arguments used by individual life underwriters in the field to place insurance contracts. Without undertaking to evaluate the relative importance of each, it is apparent that the cost to the insured (or the dividend record in the case of mutual companies) is a potent argument when one company is being weighed against another. It must be taken for granted, then, that there will be a compelling need for insurance companies to cover fully their contractual yield and in addition there will be a tendency to seek out the highest possible rate of return on the investment portfolio consistent with the basic safety of the funds invested and the legal requirements under which such investments are made.

The current level of interest rates has great effect on the demand for Government securities by life insurance companies, since the contractual obligations of the companies require them to obtain a certain average return on their entire portfolios. When the current yield on Government bonds is not sufficient to meet this requirement, life insurance companies necessarily look more aggressively for other forms of investment to provide higher returns. Thus when yields are low relative to need for income, insurance companies' demand for Government securities will tend to diminish and their demand for other types of securities and for mortgages will increase. When yields are high, insurance companies tend to be more willing to buy Government securities and to retain those they already hold.

Expectations with respect to changes in interest rates probably have impacts of two principal kinds on the investment policy of these companies: (1) There will be shifts within the company's portfolio of Government securities alone, i. e., selling of long-term issues and purchasing of short-term securities if a transition to higher long-term interest rates appears to be in prospect, or a lengthening of maturities in anticipation of a transition to a lower level of rates. Such readjustments in portfolios would continue until changes in prices and yields of the securities had occurred sufficient to stop or reverse the course of the operations. (2) There will be changes in attitude toward longer-term credit commitments at fixed interest rates, if rates are expected to change. This would be accompanied by increased or decreased willingness to buy and hold Government securities as compared with other credits, depending on the anticipated direction of the interest rate move. It should be noted, however, that the continuing need for an interest yield on their funds limits the extent to which insurance companies can hold uninvested funds or invest in short-term securities, gambling on an expectation of a rise in long-term rates. Unless the interest adjustment is expected to be significant and imminent, a loss of interest return in the short run may quickly eat up any later gain in income from investment at the expected higher long-term interest rate. This sort of consideration applies even when the short-term rate is above the long-term, since the investor who holds his high-yielding short-term issues too long may miss the opportunity to acquire long-term securities at an advantageous rate. Insurance companies, as well as most other long-term investors, must count for the most part on an averaging of yields on investments made at different points in time.

The magnitude of advance commitments undertaken by these institutions is so great as to bring out an important point with regard to the long-range effect on life insurance companies' net demands for Government securities which is caused by a shift from expectation of rate stability to expectation of rate variability. From the point of view of the company, advance commitments to extend credit become less desirable whenever there is uncertainty as to the future course of interest rates. At the same time, many would-be borrowers are discouraged from obtaining advance commitments unless definite financing arrangements can be made. Builders of large-scale housing projects, for example, are reluctant to undertake new projects, unless they can be assured of an adequate supply of mortgage money and at the rate of interest which in their opinion will enable them to offer the completed houses to prospective buyers on attractive terms. Many projects which would be undertaken if advance commitments at favorable rates could be obtained would be abandoned if lenders refused to enter into contractual agreements at fixed rates. This scaling-down of other outlets for institutional investment funds automatically results in increased demand for other investments, including Government securities, and tends to serve as a check on further advances in interest rates.

Mutual savings banks, savings and loan associations, and casualty insurance companies.—The necessity for competing with life insurance companies for investments has caused these institutions to resort in some degree to the advance commitment technique already mentioned. They also purchase substantial amounts of assets in the open market. Due to the nature of these companies, they require a higher degree of liquidity on a certain portion of their assets.

In general, these institutions meet their liquidity needs through investment in Government securities, and net demand for Governments equal to a certain portion of their total assets is assured. That part of their Government security portfolio which is held for liquidity would normally be short-term. They may tend to invest these short-term funds in long-term Governments when they feel the risk of a price decline in long-term bonds to be small. In many respects, the investment practices of these institutions follow much the same pattern as those of life insurance companies.

Public and private pension funds.—At the present state of their development, most pension funds have current income far in excess of current needs and therefore have little need for a high degree of liquidity in their investments. Accumulations of new funds are steady and in most cases at a highly predictable rate. Because of need for safety of investment principal and simplicity of administration, their investments tend to be concentrated in marketable securities of the better grades and do not include an important volume of mortgages, as in the case of insurance companies. Trustees are under pressure to obtain an investment return consistent with the average yield expectation (usually conservative) used in calculating contributions in relation to benefits.

In the early stages of development of many pension funds, the great bulk of investment probably was concentrated in Government securities. There has been a tendency, however, as these funds have grown, to seek a somewhat higher rate of return than has been prevailing on Government securities, because pension payments have been based generally on an average yield from investments above these rates. An increase in the return on Government securities, which would bring their yields to the computed requirements of pension funds would have a potent effect on the investment of such funds in Treasury issues.

An expectation of an upward shift in interest rates would alter the investment patterns of pension funds, but unless the rise were expected to be sharp it would pay the funds to keep fully invested. Since a change in interest rates on prime issues is usually accompanied by changes of much greater magnitude in secondary securities, pension funds would tend to go into the highest grade securities when higher rates were expected. In addition, for the larger funds with more highly specialized managements, a shift from long-term to short-term Government securities would possibly be undertaken until the long-term rate had gone as high as it was expected to go. Such switching, however, would not diminish the total pension-fund demand for Government securities.

An expectation of lower interest rates would increase the demand for long-term issues since these would promise the greatest appreciation in price. Among the more sophisticated pension-fund managers there would be a special demand for intermediate-grade corporate issues because at the top of an interest-rate move the yield difference between prime and secondary issues usually reaches its widest spread. Consequently, the greater profit potential inherent in securities which undergo wider price fluctuations would make them more attractive at a time when yields are expected to fall and prices to rise.

When yields are declining, however, the volume of funds available for investment tends to be in excess of the demand. At such a time pension funds as well as other small institutional investors tend to be at a disadvantage in investing their funds as compared with the larger insurance companies and savings banks. The latter have the organizations for seeking out credit demands and arranging for private placements while generally the former do not. Thus, when yields are declining pension fund investments tend to be channeled into seasoned securities available in the market or into issues available on tap at the Treasury.

Nonfinancial corporations and State and local governments (except pension funds).—These investors usually turn to securities with the very highest degree of liquidity, either very short-term United States Government securities or issues with a maturity date which coincides with a known need for funds. By their nature these funds are usually earmarked for a specific purpose, as for example the payment of taxes by corporations or, in the case of State and local governments, their surplus or borrowed funds for construction or similar purposes. In both cases safety of principal and liquidity of funds takes precedence over the income from investments.

The actual level of interest rates exercises a strong influence on this demand for Government securities. At very low rates of interest there is little or no reason for these investors to do other than hold their funds in the form of bank deposits, since the income derived is not sufficient to warrant undertaking the problems of investment. As interest rates on short-term securities reach higher levels, however, more and more of these funds will seek these outlets.

Expectation of changes in interest rates has little effect on this investment demand since the holdings are typically in very short-term securities which are not subject to great changes in price as a result of changes in interest rates.

Individuals, private trusts, endowment funds, etc.—Demand for Government securities from smaller investors in this group is concentrated principally in savings bonds. To these investors, savings bonds serve as an alternative to other savings media since they are generally not in a position to make use of other forms of capital investment. To them the current rate of interest on such bonds is important insofar as it compares with other available outlets for savings, i. e., deposit accounts in savings departments of commercial banks or mutual savings banks, or shares in savings and loan associations.

In the case of large individual investors, trust funds, and endowment funds, investment policy can be expected to be geared to capital market developments and prospects as well as to economic trends generally. Since the requirements and objectives of such investors are varied, and since the outlets available to them tend to be nearly unlimited, it is difficult to generalize on investment techniques. Broadly speaking, there seems to be a more or less constant switching among investment outlets in order to take advantage of the most favorable current interest returns consistent with other objectives. Switching to take advantage of anticipated changes in interest rates is also common. In many cases tax matters overshadow other considerations of investment outlet, and the tax-free income obtainable on State and local government securities as well as some Federally guaranteed securities is eagerly sought even at interest returns substantially below those obtainable on taxable issues of comparable quality and maturity. Tax considerations involved in taking capital gains often tend to freeze investment in certain securities even though, aside from tax considerations, substitution of other investments might be advantageous to the investor.

Whatever may be the effect of expectations of interest rate changes on either the small or the large individual investor, concern and expectations with regard to the future purchasing power of the dollar probably are at least as important in influencing their spending and investment decisions.

Many trusts and endowment funds follow fixed rules regarding ratios of fixed-income securities to total assets. These ratios are constantly preserved through sales or purchases of one type of investment or another. For example, rising equity prices or real estate values while interest rates (and therefore prices) of fixed income securities remain constant would tend to overbalance the investments in favor of the appreciating medium; in order to regain the desired or established ratios, the fund would then dispose of a portion of its equity or real estate holdings and reinvest these funds in fixed income issues.

With the foregoing qualifications, holdings by trust and endowment funds of Federal Government securities as opposed to other debt issues probably are affected in much the same way as for the various savings institutions mentioned above. Here again, the existence of uncertainty as to interest rates would tend to increase their aggregate demand for Government securities because it would increase the desire for prime assets; certainty that interest rates will not change removes one fundamental reason for maintaining a substantial part of their earning assets in the highest grade securities.

Foreign investors.—The demand for United States Government securities by foreign investors can be divided into (1) the demand by foreign monetary authorities and (2) the demand by private foreign investors. Foreign monetary authorities' interest in United States Government securities is confined almost exclusively to short- and medium-term securities. Investments of this type are made when a monetary authority has accumulated dollar balances beyond its current and prospective needs and wishes to keep a secondary reserve in relatively liquid form, on which it can earn some return. This form of investment is limited by the fact that many foreign monetary authorities traditionally convert their dollar holdings, in excess of working balances, into gold.

The current level of interest rates on United States Government securities and expectations with respect to changes in these rates have some influence in determining the distribution of foreign dollar reserves between deposits, securities, and gold. However, the strength of foreign authority confidence with respect to the dollar price of gold is at least as important. A key factor in the investment in United States Government securities by foreign monetary authorities is, of course, the size of total foreign reserves; as foreign dollar earnings rise or fall, their investments in United States Government securities may generally be expected to rise and fall.

Private foreign holdings of securities payable in dollars are probably smaller and recently have been more stable than official holdings. The demand for United States Government securities by private foreign investors is subject to considerations similar to those affecting domestic investors. The amount of private foreign dollar holdings and the form in which they are kept, however, are also greatly influenced by expectations as to exchange rates in addition to current and prospective interest rates and the other considerations that are important to most domestic investors.

35. What is the reason for the relatively slight use by commercial banks of the Federal Reserve discount and borrowing privilege? Do you believe that greater reliance should be placed on this privilege as a means of obtaining Federal Reserve credit? Under what conditions, if any, would you expect to see a greater use made of the discount privilege?

A reply to this question may be conveniently divided into five parts: (*a*) why individual member banks do not make a practice of borrowing from the Reserve Banks to expand operations; (*b*) why member banks as a group have not borrowed more from the Reserve Banks over the past two decades; (*c*) the relation of changes in credit conditions to use of the discount privilege; (*d*) the desirability of banks placing more reliance on borrowing to obtain Federal Reserve credit; and (*e*) the significance of changes in Reserve Bank discount rates. Each of these parts has a bearing on the credit policy problem posed by this question.

Why individual banks do not borrow Reserve Bank credit to expand operations.—Long experience with fluctuations in economic activity and with financial difficulties and insolvencies incident to such instability has made the American business and banking community look unfavorably on a position of large or continuing borrowing on the part of individual banks. The debtor status of banks is shown in their published balance sheets and at times in special reports requested by large depositors. The attitude regarding borrowing results in part from the fact that in bank insolvencies recovery on such borrowing may reduce amounts available to satisfy the claims of depositors. A technical bank management factor is that borrowed funds are usually expensive as compared with alternative sources of loanable funds.

For these reasons, it is a well established rule of prudence for bank management that borrowing from other banks, whether correspondents or the Federal Reserve Banks, should be for temporary periods only and primarily as a transitory means of replenishing reserves when they have fallen below current legal or operating requirements. The managements of banks obliged to borrow, accordingly, feel under great pressure to readjust their loan and investment positions as soon as possible with a view to paying off their indebtedness. This attitude on the part of bank management with respect to indebtedness other than to depositors is commonly described in banking literature as the tradition against commercial bank borrowing.

In addition to this general tradition against commercial bank borrowing, Federal Reserve Bank credit has always been thought of as a resource available to member banks to meet unusual temporary and seasonal requirements rather than to meet continuing operating needs or to provide a substitute for new capital. The Reserve Banks together have the responsibility of providing liquidity for the entire banking system,[57] and each Reserve Bank in meeting its share of this responsibility must examine carefully individual cases of member bank borrowing. Reserve Banks are also obliged by legislative directive to evaluate borrowing applications with respect to whether undue use is being made of bank credit for speculative purposes or for other purposes inconsistent with sound banking conditions.[58] Continuous indebtedness of a member bank to a Federal Reserve Bank, therefore, is necessarily a matter for review and discussion between the Reserve Bank and the member bank with a view to ascertaining what adjustments the member might make to reduce its indebtedness.

Member banks which have a temporary need for Federal Reserve funds, often seek to borrow such funds from other member banks that temporarily hold Reserve Bank balances in excess of legal reserve requirements when these funds can be obtained at less than Reserve Bank discount rates. As a result of this practice, a fairly well organized market in Federal funds has come to be developed, involving a varying volume of funds depending on general credit conditions. When conditions are favorable to the Federal funds market, an effect of its operation is to economize on the use of the discount or borrowing privilege by individual member banks.

The foregoing factors, while important, are still only a partial explanation of the relatively slight use by individual member banks in recent years of the Federal Reserve borrowing and discount privilege. Another part of the story is the general portfolio and liquidity position of member banks and the weight of advantage in making reserve adjustments by the sale or run-off at maturity of a bank's prime paper, particularly Government securities, as against borrowing.

Whether it is less costly to obtain funds by rediscount or by the sale or maturity of readily marketable assets is a matter of the relationship of short-term rates in the money market to discount rates at the Reserve Banks. Whenever the supply of funds in the money market seeking lodgment in prime short-term paper is large enough in relation to the demand to reduce short-term money rates to levels significantly below the discount rates, it is cheaper for individual banks to obtain reserve funds by disposal through the market or run-off at maturity of prime paper. If the differential between short-term rates and the discount rates is narrow and paper losses, even though small, may need to be taken in disposing of marketable paper, the weight of advantage may be with rediscounting. If market rates on paper available for sale are above discount rates, the advantage clearly lies on the side of rediscounting.

Why member banks as a group have not borrowed more in recent years from Reserve Banks.—Since the early thirties, the total volume of member bank borrowing from Reserve Banks has been continuously small. This sustained small volume of borrowing has reflected a succession of abnormal banking developments, which may be summarized as follows:

(1) Prior to World War II, a very large inflow of gold combined with relatively slack bank credit demand made for a substantial and

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[57] This is generally accomplished by means of loans to or rediscounts for member banks, although nonmember banks also may borrow from the System on promissory notes secured by U. S. Government obligations. The last case of nonmember bank borrowing occurred in 1946.

[58] Federal Reserve Act, Sec. 4, par. 8; see also answer to Question A–1.

widely distributed volume of bank reserves in excess of legal requirements. At the prewar peak (October 1940) excess reserves of member banks amounted to almost 7 billion dollars, and at the point of this country's involvement in war (December 1941), they were still almost 4 billion. Under the then existing reserve requirements, these excess reserves were capable of supporting a bank credit expansion almost six times as great. In these circumstances, few member banks needed to obtain Reserve Bank credit through rediscounting or borrowing, and, under the pressure of the supply of funds, market rates on prime paper fell to and remained at exceptionally low levels. In a very real sense during this period, Reserve Bank discount facilities had only standby functional importance.

(2) During World War II the Federal Reserve System as a matter of policy in support of war finance undertook: (*a*) to supply the banking system through open market operations with the reserves needed to assure both absorption by the banking system of the Government securities not taken up by nonbank investors and supplying the wartime increase in currency in circulation; and (*b*) to maintain selected interest rates (the shortest-term and longest-term) at fixed levels. As the financial requirements of the war effort expanded constantly and rapidly until the end of hostilities, banks could readily obtain reserves by sales of short-term Government securities to the Federal Reserve. Moreover, many of the bills sold by the Treasury to the market were taken up by the dealers and shortly resold to the Federal Reserve at its fixed buying rate. In this manner banks were supplied with reserves without action on their own part. Thus, during this period, banks had little need to resort to the discount or borrowing privilege.[59] Over the entire period of the war, Federal Reserve holdings of Government securities increased from a little over 2 billion dollars to over 24 billion. This increase in holdings financed an increase of over 3 billion dollars in member bank reserves as well as an increase of currency in circulation amounting to over 17 billion.

(3) Over the period of war finance, member bank holdings of Government securities, primarily short-term issues, increased from about 20 to 75 billion dollars. The proportion of such securities in the asset structure of member banks doubled, from about 30 to almost 60 percent of total assets. Thus, member banks entered the postwar period with exceptionally strong liquidity positions which permitted great flexibility in making adjustments in reserve positions through the sale or maturity of Government securities. During postwar years and until the Treasury-Federal Reserve accord in March of 1951, Federal Reserve open market operations had the effect of maintaining in the Government securities market conditions making for a high degree of price and yield stability. These operations made Federal Reserve credit available at the call of the market at rates well below discount rates and fostered adjustment of bank reserve positions through Government securities transactions. In these circumstances, member banks generally found infrequent occasion for resorting to the discount or borrowing privilege and Federal Reserve discount mechanism had little active importance.

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[59] During the war period the Reserve Banks maintained a preferential discount rate on advances collateraled by short-term Government securities at ½ percent lower than the discount rate on other paper. In 1945 and 1946 there was some tendency for member banks to borrow at this rate.

Relation of changes in credit conditions to use of the discount privilege.—With the readjustment in Federal Reserve credit operations following the accord reached with the Treasury in the spring of 1951, member banks have made modest use of the discount and borrowing privilege. The rise in short-term interest rates which accompanied the adjustments of Federal Reserve credit narrowed the differential between these rates and Reserve Bank discount rates, making discounting more advantageous. Also purchases of short-term Government paper by investors generally, which were induced by the rise in rates, reduced the need for Reserve Bank purchases of such paper to maintain orderly conditions and this limited the Federal Reserve credit made available to member banks through this channel.

A further factor working to increase member bank borrowing in these changed conditions has been a cumulative, though gradual, reduction in over-all banking liquidity which has accompanied the rapid expansion in private bank credit over postwar years. With the very sharp further increase in such credit following the Korean outbreak, the liquidity position of a significant number of banks became such that, with altered methods of Federal Reserve operations, rediscounting was made more advantageous, in comparison with Government security transactions, in effecting reserve adjustments.

Should inflationary credit trends be resumed during the national defense emergency, conditions would obtain which would tend to make for increasing use by member banks of the discount and borrowing privilege. On the other hand, if inflationary pressures should abate materially, or if some deflationary readjustment were to occur, then general credit conditions would work against any tendency towards a greater use of the discount and borrowing privilege.

The desirability of banks placing more reliance on borrowing to obtain Federal Reserve credit.—One of the original purposes of the Federal Reserve Act was to provide *temporary* credit accommodation to member banks in order to enable them to meet more readily the seasonal and other unusual credit demands of their customers. Accordingly, it is believed by the System as well as by the member banks, the latter particularly for reasons of prudent management, that *continuing* indebtedness to the Reserve Banks should be avoided. This reluctance on the part of member banks to be continually in debt to the Federal Reserve makes the discount mechanism a potentially powerful influence in affecting general credit conditions, especially when used in conjunction with other general measures of credit and monetary policy.

When occasion makes it desirable from the standpoint of over-all credit and monetary objectives, the System can make it necessary for an increasing number of member banks to rely temporarily on borrowing from the Reserve Banks. It can accomplish this by decreasing the availability of reserve funds by such means as open market sales of Government securities or the imposition of higher reserve requirements. When such an increase in member bank recourse to borrowing occurs, usually accompanied by a rise in the volume of rediscounts, the System is put in a position to exert an additional restrictive influence on the expansion of bank reserves and of bank credit generally by increasing the cost of member bank borrowing, that is, by raising the discount rate.

Greater reliance by member banks on borrowing to obtain reserve funds has pervasive restrictive effects on credit expansion throughout the banking system even though at any one time the number of borrowing banks and the dollar volume of borrowing is comparatively small. Indebted banks tend to retire their indebtedness before seeking other uses for available funds and this operates to tighten the availability and supply of credit. The act of repayment of borrowing by one bank is likely to reflect transfers of reserve funds from other banks. The fact that these funds are eliminated from the market by repayment of borrowing rather than returned to the market through investment or lending results in a total market deficiency in reserve funds and puts other banks under pressure to borrow or liquidate assets. Thus, a given volume of Reserve Bank indebtedness is owed by a shifting group of member bank borrowers, with the restrictive effect on bank credit expansion resulting from the need to reduce such indebtedness tending to spread through the banking system and to change the climate of the credit market.

The discount instrument of credit policy, when used in conjunction with other policy instruments, can also have pervasive effects in easing credit conditions generally, thereby checking contraction of bank loans or bringing about a resumption of expansion. The mechanics by which the instrument operates in an easing direction are in general the reverse of those described for operating in a tightening direction. Reserves can be made available to member banks through open market purchases of Government securities or a decrease in reserve requirements by the Federal Reserve. These reserves can be used by banks to reduce their indebtedness to the System. Reduced indebtedness operates to make banks less anxious to curtail credit lines and more anxious to augment them.

Significance of changes in Reserve Bank discount rates.—As made clear above, changes in discount rates in accordance with changes in general credit conditions are essential features of the discount mechanism of credit policy. Customary Federal Reserve discount rate practice is to adjust discount rates in accordance with major changes in the volume of member bank borrowing and in keeping with movements in short-term interest rates on prime paper in the money market. Historically, the discount rate has tended to be above rates on prime short-term paper in the market—today, principally Treasury bills—and below rates on less prime market paper and rates charged customers at banks.

Considerable importance is attached to changes in discount rates by the financial and business community as indicating System policy and the underlying strength of expansive or contractive credit tendencies. Since a change in Federal Reserve Bank discount rates would be unlikely unless System officials considered an existing movement in general business and economic conditions to be more than a temporary deviation from basic trends, the market tends to look upon a discount rate change as an expression of the views of the reserve banking authorities as to the over-all credit situation.

Conclusion.—The discount mechanism is an important instrument of Federal Reserve policy. The System feels that it should rely on the restraining or easing effects of member bank indebtedness as influenced by the use of other available policy instruments, particularly open market operations, to bring about the credit conditions consistent with the maintenance of a stable and progressive economy.

36. Do you believe that there is any conflict between measures to restrain excess demand by credit control and the need for expanding the economy to meet the requirements of a continuing readiness to resist aggression and a continuing high standard of living? If so, how can the effects of this conflict be mitigated?

Resources that are diverted to armament are not available for consumption. In this sense there is a basic and inevitable conflict between these two competing sources of demand. Restraint of excess demand by credit action does not create this conflict. Instead, credit restraints minimize such basic conflict by helping to prevent the demoralization which accompanies inflation.

In a rearmament period inflationary forces are very strong because supplies of materials and other resources for use in current production and in expansion of capacity cannot be increased fast enough to match greatly expanded demands. Competitive bidding for available resources, unless checked, leads to spiraling prices and wages, and to inefficient use of resources. This competitive bidding is intensified by expansion of credit beyond what is needed to finance such increases in production as are feasible.

To the extent that credit restrictions restrain excess demand they help to maintain those orderly conditions in markets which are essential to orderly conditions in production. Credit restrictions thereby contribute to a generally high and rising level of output—over the longer term as well as in the nearby future. Assuming that given requirements of a continuing readiness to resist aggression will be met in any event—though more efficiently and equitably if orderly conditions are maintained—larger total output means a higher standard of living than would otherwise be possible. Thus, credit restrictions, like fiscal measures and other measures used to restrain excess demand, help to maintain output for civilians, and thus living standards generally, above levels which would prevail without such restrictions. If any seeming conflict between credit restraints and maximum output does appear, and it should not appear except as a transitory matter, it will reflect the difficulties of administering restraints rather than any conflict inherent in objectives.

The basic position that restraint of demand is needed to promote maximum output under present conditions may seem paradoxical. Certainly individuals prevented from buying new houses or automobiles by larger down payment requirements, by more rapid repayment requirements, or by less ready availability of funds may be expected to ask how limiting their living standards can help to maintain living standards generally. So also may the builders and dealers who thereby lose sales or receive less for their products than they would otherwise. The answer is that if there is excess demand which needs to be restrained, these credits and other credits supporting excess demands, if granted, would tend to raise average prices and the cost of the defense program, disorganize markets, distort income distribution, and dissipate resources rather than to increase total output in the economy, particularly of the more essential goods and services.

This does not mean that prices should be absolutely inflexible. Special incentives may be necessary to increase resource use and to attract resources into lines where they are most needed. It does mean, however, that in the interest of high production, any widespread changes in prices should be prevented in order to discourage withholding of resources for speculative purposes and diversion of resources into activities which interfere with high production.

The maximum possible output to be sought is not necessarily for a single month or quarter; rather it is maximum output sustainable over a long period—the only basis for enduring prosperity. Requirements of the defense program will need to be met over a considerable period and a high and, if possible, rising standard of living will be a basic objective indefinitely. The dangers for the future in permitting excess demand to go unchecked or insufficiently checked have been demonstrated many times in the United States as well as abroad. While fluctuations in business activity, employment, and income stem from many causes, excess demand in boom periods is one of the most important causes of liquidation in ensuing depression periods. This is because excess demand, if unchecked, is reflected unevenly in higher prices of commodities and services, in higher values for urban and farm properties and capital items generally, and in distorted production and income patterns.

The general position stated here concerning economic stability and production has been stated many times in the literature on business fluctuations. Nearly three decades ago the Federal Reserve Board, in its annual report for 1923, quoted an article from the March 1923 Federal Reserve Bulletin as follows:

> Whenever production reaches the limits imposed by the available supplies of labor, plant capacity, and transportation facilities—in fact, whenever the productive energies and resources of the country are employed at full capacity—output cannot be enlarged by an increased use of credit and by further increases in prices.

In the same report, the Board recognized the need for growth in credit to meet the needs of a growing economy in referring to a period when—

> the increasing volume of credit was justifying itself in the continued increase in the volume of production and consumption.

In the present rearmament period the importance of preventing inflationary developments and avoiding disrupting practices resulting from abnormal market conditions was early recognized in various legislative measures including the Defense Production Act. In that Act, as part of the stabilization program, provision was made for regulation of consumer credit and real estate construction credit and the voluntary restraint of credit extension.

The Federal Reserve System in this period has been concerned primarily with the problem of restraining excess demand and thereby furthering high output for defense and civilian purposes, as well as maintenance of the value of the dollar. Restraining inflation has been the broad aim of its general policies relating to discount rates, reserve requirements, and open market operations and also of its other policies.

Selective regulation of credit extended for the purchase of consumer durable goods and houses adopted in the autumn of 1950 has operated over time to restrict the total volume of credit and the supply of money and also to dampen civilian demand in these particular fields. Continued regulation of stock market credit has helped to restrict the volume of credit in that area. In addition, the Board of Governors this year has aided in setting up a voluntary credit restraint program, described fully in the answer to Question F-42. At the same time, to assure adequate working capital for defense production the V-loan program for guaranteeing private loans to defense contractors was re-established in September 1950.

Just how the record of the year and a half after June 1950 will be read in the future by students of economic history we cannot know. They will have the benefit of information about what happened next and they will be able to assess developments with a detachment difficult for those close to the event to achieve. Many facts pertinent to the question in hand, however, are known now.

The danger that the rise in prices already under way before the Korean outbreak would be greatly accelerated by that event was widely recognized. In September 1950 legislation was passed providing for higher taxes and authorizing various actions to channel needed resources into defense activities and at the same time to stabilize prices. Regulation of consumer installment credit, begun immediately under the new authorization, helped to stop the earlier rapid expansion in such credit. Regulation of real estate construction credit under the new law was initiated in October but, primarily because of a large backlog of commitments made earlier, had only limited restrictive effect for a considerable period. The effectiveness of various general credit measures taken was offset by the sale of substantial amounts of Government securities to the Federal Reserve by financial institutions. Toward the end of the year, with the Chinese intervention in Korea, demands generally were again greatly stimulated and the need for stronger action to restrain excess demand was emphasized by further marked price increases. Meanwhile, in the first half year after the Korean outbreak production had expanded sharply, with large increases in output of goods for civilian purposes as well as for defense, and for both current use and expansion of capacity.

Since the spring of 1951, prices have shown little change. In mid-December, wholesale prices were moderately lower than in March and 13 percent above June 1950, and consumer prices were somewhat higher than in March and 11 percent above June 1950. More orderly developments since the early part of 1951 have reflected tightening of fiscal and credit restraints on demand, imposition of price and wage ceilings, a marked shift in the inventory situation, changed expectations as to the course of prices, and other developments, as explained in the answer to Question F-32.

In this period of relative price stability, the physical volume of production has shown little change at the advanced level reached early in the year. While output of consumer goods has declined appreciably—as consumer demands were only moderate and inventories were being reduced rather than increased—defense production and inventories have increased. In industry—at factories and mines—production continued through 1951 about 10 percent above the fairly high June 1950 level. Business expenditures for plant and equipment during the year were about $23 billion, as compared with $20 billion in 1948, the previous peak year. Nonfarm employment in the latter part of the year was over 2 million persons above June

1950 and, with the Armed Forces increasing in this interval, unemployment was down from 3.1 million in June 1950 to a range of 1.6 to 1.8 million in the autumn of 1951. This was the lowest level since 1945. In view of these facts it is evident that, with prices showing little further change, production of goods and services and utilization of resources since the spring of 1951 have been very high.

The approximate balance in the economy in 1951 prevailed at a time when the expanding defense program was not exerting its full impact on the economy. As the program expands further, it will make increasingly severe demands upon available resources. Further substantial increases in over-all output are likely, but such increases in output will generate a growing volume of private incomes after taxes which can serve as the basis for increased private demands. Simultaneously the needs of the defense program will be diverting resources from private use. While supplies of many goods may be adequate, shortages of some items required for defense will persist and for some important types of goods for civilian use supplies may be reduced, or at least not increased, while demands may increase considerably. This is the heart of the inflation problem confronting us for the period ahead.

The whole problem of preventing demand from exceeding production at prevailing prices is aggravated by the fact that private demands need not be and are not limited to incomes arising out of current production. Under some conditions private demands may be higher than current income because of the increased use of accumulations of money or other liquid assets—or because of credit expansion. Measures of credit restraint are designed not only to check credit expansion but also, by helping to stabilize conditions generally, to promote retention of accumulated savings and to encourage new saving out of current income.

Expansion of capacity and the modernization of equipment to increase output in essential industries is continuing to have a major place in the over-all defense program. The Government early took steps designed both to stimulate such expansion of investment and to insure adequate supplies of needed scarce resources for this purpose. Private investment regarded as essential has been stimulated by allowing rapid amortization for tax purposes, and the allocations program of the National Production Authority has channeled needed resources into this expansion. At the same time, however, steps have been taken to curb less essential investment such as that for commercial construction.

In the short run, expansion of plant and equipment tends to exert an inflationary pressure similar to that exerted by the defense program. Such expansion, once initiated, adds to current market demands and absorbs available resources which might be used for satisfying consumer demands. At the same time it provides consumers with additional incomes. Over longer periods, however, investment expenditures differ from defense outlays, in that they provide facilities which make possible a larger volume of production, if the facilities are wisely planned and if when they are completed the labor and materials needed are available for production.

Expanding defense production and the record level of private investment exert very heavy pressures in markets for durable goods and the materials used to make them. Copper, aluminum, some other nonferrous metals, and some types of steel are in extremely short supply. Production of these basic metals in the latter part of 1951 was about as high as presently available facilities would permit, with steel mills operating well over rated capacity. Machine tools are in very short supply relative to present exceptional demands and orders are booked far ahead. The problems associated with the limited supplies of such goods do not lie in the availability of credit, which has not been a limiting factor with respect to them. The problems lie rather in the determination of the most appropriate use, for purposes of national security and welfare, of these limited resources until expansion of facilities or special measures to bring marginal facilities into use permit the production of increased supplies.

With key material resources and manpower scarce, careful screening of loans by the banks and other financial institutions, induced by past and current credit and monetary policies, performs the useful function of making it easier for borrowers to obtain funds for essential purposes while making it more difficult for borrowers to obtain credit for nonessential purposes. Since available supplies of critical materials and manpower are generally being used, this screening helps to prevent multiple bidding for the same resources which would have the effect of breaking the price line, encouraging the growth of black markets, and perhaps permitting nonessential uses to attract resources at the expense of defense-supporting uses. At the same time voluntary selective restraint by lending institutions helps—along with various selective regulations and, particularly, the basic fiscal and general credit restraints in effect—to prevent unnecessary expansion of the use of credit and the money supply and thereby to minimize over-all inflationary pressures.

The advantages to be achieved by maintaining stability in the economy are many and by no means limited to those resulting from high output. It is important, for example, that the cost of the defense program, large in any case, be not increased by price advances. Moreover, maintaining the value of the dollar is essential if those whose incomes adjust slowly and those who put their savings into savings bonds, insurance policies, time and savings accounts, savings and loan shares, and other fixed obligations are to share equitably in the distribution of the national product. Over the longer term the habits of thrift and saving so basic to the private-enterprise, free-choice economy of this country can be maintained only if fairly stable conditions are maintained in the markets of the economy. Finally, maintenance of the value of the dollar will contribute greatly to the development of the orderly economic conditions abroad which are so essential as a part of the general program for political security and economic well-being.

37. What do you believe to be the role of bank examination and supervision in furthering the objectives of the Employment Act?

The banking system of this country must be maintained in a strong condition, capable of meeting effectively the diversified financial needs of a vigorous economy if the objectives of the Employment Act are to be attained. The fundamental purpose of bank examination and supervision is to contribute to the maintenance of individual banks in a sound condition and a sound banking system collectively. To the extent that they do so, bank examination and supervision contribute to the objectives of the Employment Act. Compared with other forces affecting the economy in general, and banks in particular, however, bank examination and supervision play only a minor role.

Bank examination is an important phase of supervisory work. Its purpose is to ascertain whether laws and regulations are being observed, and to appraise the assets of individual banks, the solvency of the institutions, and the character and competency of the managements. Other phases of supervision have to do with steps taken to effect the correction of unsatisfactory conditions disclosed by reports of examination; the organization and liquidation of banks, the establishment of branches, and the authorization of certain powers; the issuance, interpretation, and enforcement of regulations; and the review of reports of condition and earnings and expenses of banks.

Bank examination and supervision can exert restraint on extension of bank credit. They cannot compel a bank to extend credit, nor should they attempt to do so. It is important, however, that the supervisory process not accentuate cyclical swings by lending itself to overextension of bank credit in boom times or conversely to contraction of credit at times when the need is to halt and then reverse a downward trend.

In this connection the bank examination agreement adopted in mid-1938, and amended in 1949, by the Federal supervisory agencies and the Executive Committee of the National Association of State Bank Supervisors, was particularly designed to further the maintenance of economic stability. Through its emphasis upon appraisal of bank assets in terms of intrinsic rather than current market values, the agreement operates to prevent appraisals of bank assets from being unduly influenced by transitory market conditions associated with fluctuations in economic activity. The agreement is discussed in greater detail in the answer to Question I–59.

On occasion, bank examination and supervisory activity have given special cooperation in furthering national economic objectives. As discussed more fully in the answer to Question F–43, the supervisory authorities during the World War II period, again in 1947, and later during the post-Korea emergency issued joint statements appropriate to the current economic situation. Though these measures have been limited as to purpose, they serve to illustrate how bank examination and supervisory activity have provided special assistance in furthering economic stability.

38. What selective regulations other than those over stock market credit, consumer credit, and real estate credit do you consider to be feasible? What would be their applicability under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33?

(Assumptions in Question F–33 are as follows: restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future, (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future, (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and (*d*) under conditions of total war.)

Suggestions for extending statutory selective regulation to credit areas in addition to those now covered have been explored.[60] One of

[60] It is assumed in this reply that the question refers to the extension of selective measures to credit areas other than those presently subject to statutory selective regulation, rather than to authority for broader or more effective coverage of existing regulations.

these—the provision of authority to prescribe rules and regulations governing the margin to be required with respect to speculative purchases or sales of commodities for future delivery—has been recommended by the President and others. Aside from this one specialized field, where little bank credit is involved, none of the proposals for extending statutory selective credit restraints has appeared either feasible or desirable.

The comparatively favorable experience of the Federal Reserve System in administering selective regulation in the areas of stock market credit, consumer credit, and real estate credit is unique and is being followed closely in this country and abroad by students of credit and monetary policy. The general history of other attempts to restrain inflationary credit expansion through regulation of the amount of funds that may be loaned on particular transactions or through imposition of ceilings on particular categories of credit, either in this country or abroad, has not been such as to engender great faith in their efficacy.[61] Reasons why these methods have usually failed in effectiveness include, among others, the fluidity of the credit market, availability of alternative sources of funds, the ability to substitute collateral, and the difficulty—amounting in many credit areas almost to impossibility—of drafting and administering regulations which will accomplish their anti-inflationary objective, i. e., to restrain credit expansion without at the same time hampering unduly extensions of credit essential to the functioning of the economy.

To be effective, selective regulation of credit must relate to an area which is reasonably definable in terms of such things as the purpose of the credit, the collateral for it, or the nature of the credit contract. Trade practices should be specialized and sufficiently standardized so that the regulation can be applied in terms of a continuation or extension of those procedures rather than a drastic disruption of them.

Furthermore, the credit area subject to regulation must be important enough in terms of size and volatility so that its regulation can help to reinforce general credit measures; and the flow of credit should be responsive to practicable adjustments in the borrower's equity or loan maturity. The selective credit regulation must not unduly impede permitted credit transactions and there must be a minimum possibility of successful evasion in the case of other transactions. Lastly, the constructive results of regulation must be great enough to outweigh the burdens associated with it—both on those subject to it and on those administering it.

Selective regulation of stock market credit over a number of years has successfully met these tests. As pointed out in subsequent replies, thus far they have generally been met in recent experience with Regulations W and X. Both regulations are still experimental, however. It would be premature, for example, to say that, should enforcement problems become serious, the Federal Reserve System could appropriately continue to administer them. Until a much longer record of experience has developed, any judgment as to their long-run effectiveness as well as desirability must necessarily be tentative. Nevertheless, the amount of credit in each of these areas is certainly of sufficient magnitude and its role in the economy is sufficiently important to warrant consideration from the point of view of selective regulation.

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[61] With respect to foreign experience, see reply to Question G–52.

A variety of factors account for the generally unsatisfactory experience with attempts to impose selective credit regulations in other areas than these three. As mentioned above, it is necessary to establish some broad tests by which the regulated area is defined, and this has usually been done in terms of the purpose of the credit, the collateral for it, or the nature of the contract.

These tests are especially difficult to apply when the borrower is a business, and as such is engaged in a variety of simultaneous and interrelated operations that employ substantial amounts of credit for varied purposes—for example, to meet payrolls, to acquire inventory, to extend credit to customers, to pay dividends, or to expand plant. Moreover, businesses have a variety of sources of funds as well as a variety of bases on which they may borrow. The decision as to whether the loan is secured, and if so the nature of the collateral, is likely to depend less on the nature of the credit than on the preferences of the lender and on the outcome of extensive negotiations between lenders and borrowers involving the exercise of experienced judgment. Specialized and standardized lending practices are not adaptable to such credit, but rather loans are closely related to the lender's appraisal as to the borrower's general credit-worthiness, with terms and conditions tailored to fit the individual borrower's needs. To apply selective credit regulation in such an area it would be necessary to impose standard credit terms and procedures in a manner which would be especially burdensome and disrupting to both lenders and borrowers.

In part, the favorable experience which the Federal Reserve System has had with its existing selective credit regulations is attributable to the fact that they apply in fields where credit practices and procedures are comparatively standardized, and no radical departure from these practices is involved in the application of the regulations.

The considerable problems which have beset attempts abroad to restrain credit expansion through the imposition of selective credit ceilings are discussed in the answer to Question G–52.

39. What do you consider to be the role of selective regulation of stock market credit in restraining inflation under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33?

(Assumptions in F–33 are as follows: As a means of restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future, (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future, (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and (*d*) under conditions of total war.)

In a highly developed economy such as in this country, securities exchanges play an important role in facilitating the flow of funds between various sectors of the economy. The reasonable use of credit is a natural and normal aid in carrying out that function.

Prices of stocks fundamentally reflect investment experience and prospects. The process of capitalizing incomes and expectations, which these prices represent, is a continuous activity in the market, and stock price fluctuations are closely associated with changing attitudes and expectations with respect to stock yields. Stock market credit is a related factor affecting market activity and price fluctuations, and changes in its volume are both an effect and a cause of current credit and monetary developments. It must always be recognized, however, that stock market credit is only one aspect of stock market movements.

Before the establishment of the Federal Reserve System, the relationship between stock market credit and banking in general was an unusually close and often critical one, because a large portion of the reserve balances of banks throughout the country were held on deposit with New York and other large city banks, and these deposits supplied the New York banks temporarily with a large volume of reserves which they utilized in expanding their loans in the call money market (the principal market for stock market credit). The supply of these funds was subject to wide variations. When surplus funds of banks went into stock market loans, they stimulated trading and affected economic activity. The withdrawal of funds, on the other hand, frequently led to severe declines in the stock market, to credit liquidation, and to money panics. The cause-and-effect relationship also worked in the other direction, changes in stock market activity having pronounced effects on general credit conditions. Thus, there was an extremely close relationship between the stock market, the money market, and credit developments.

One of the aims of the establishment of the Federal Reserve System was to divorce the reserves of the banking system from the stock market and to diminish the influence of stock market speculation upon bank credit. This objective was not fully accomplished, however, because the call money market continued to attract large amounts of liquid funds from banks and others. In the twenties stock market loans made by banks and by nonbank lenders rose to new high levels. This credit and the speculative activity it financed gave a strong stimulus to economic activity that in many instances was of a fleeting and unsound character.

When Congress passed the Securities Exchange Act of 1934, one of its important purposes, in addition to providing general regulation of stock exchanges, was to cope with the dangers of excessive use of stock market credit. The Act authorized the Federal Reserve Board to prescribe margin requirements for both brokers and banks, and for others if found necessary. These credit provisions of the Act, chiefly in Section 7, repeatedly emphasize that the goal is to "*prevent* the excessive use" of stock market credit. Accordingly, in administering those provisions, the Federal Reserve, through its Regulation T that applies to brokers and its Regulation U that applies to banks, has attempted to prevent excesses rather than waiting to deal with them after they have arisen. Therefore, if stock market credit today appears to be less closely related to stock market fluctuations than formerly, it does not alter the significance of the *tendencies* that are discussed below and that reflected themselves in more volatile form before the legislation.

Selectivity of stock market credit regulation.—A special characteristic of stock market credit regulation is its effectiveness in restricting the use of credit in the stock market even when the objectives of overall credit policy require that the supply and cost of credit remain easy for the economy generally. The use of stock market credit may be tightly restricted by the regulatory terms even when credit availability generally is relatively easy. An important reason for the selective regulation of stock market credit is that high interest rates are a relatively minor factor in discouraging speculative stock market borrowing at times, as in the late twenties, when large profits are expected from the pyramiding of stock purchases on credit. Because of these features, the selective regulation of stock market credit makes it easier for the general credit instruments to be used in carrying out the objectives of credit policy, independently of the need for restrictive or expansionary action in the stock market credit sector.

Basic effects of stock market credit.—The most basic immediate fact about stock market credit is that, like other credit, when it expands it tends to increase, by the use of the credit, the demand for the thing purchased. In other words, when stock market credit is expanding it tends to increase the demand for stocks or, more specifically, for stocks that are publicly offered or traded. Hence, expansion in stock market credit tends to raise the price of stocks, although such effect may be partly offset by new flotations that increase the supply.

A second major fact about stock market credit is that in the financial organization of this country changes in this credit are financed largely through the banking system, either through loans to brokers or through loans directly to customers for the purchase and carrying of listed securities. As these loans go up, the deposits of commercial banks also rise, thus increasing the money supply. An increase in the money supply from this source is fundamentally unstable for it tends to be dependent on stock prices and stock market expectations, which are highly volatile.

These basic facts about stock market credit can be expanded into a statement that an increase in stock market credit tends to have four main effects. These four main effects—which tend, incidentally, to be replaced by comparable effects in the opposite direction when such credit decreases—are as follows:

(1) By tending to raise the prices of stocks, an increase in stock market credit tends to encourage the flotation of stocks and the use of funds that can be obtained by such flotations.

(2) To the extent that the increased stock market credit is financed by bank credit, it is a factor working to expand the total money supply.

(3) Rising stock prices result in capital gains—in either unrealized or realized form—and the expectation of further rises and gains; these tend to encourage stock market participants to spend more for consumer goods and services, especially luxuries. In other words, they tend to increase expenditures for *consumption.*

(4) The expectation of gains from the rising market—and the generally optimistic business expectations that a rising market fosters, even in those who are not participating in the market—tends to encourage people to activate idle balances either by buying stocks or by purchasing other assets. Thus, they tend to activate the existing money supply—to increase monetary "velocity"—by increasing expenditures for *investment.*

The relative importance of these four effects varies in different circumstances. The third is ordinarily of relatively small importance in the total economic situation although, in a long-sustained bull market as in the twenties, this effect can grow into a force that exerts a powerful influence in directing resources into output of luxury goods and causes the structure of production to develop distortions that will increase the severity of the ensuing recession. The other effects are more generally and consistently important. They are experienced not only on the upside when stock market credit and prices are rising, but also *in reverse* when prices and credit are falling. Indeed, as indicated above, most of the things said here of rising stock market credit and prices become reversed when such credit and prices are falling.

In order to get a fuller picture of the impact of stock market credit and its regulation, it is necessary to examine the further consequences of these effects throughout the economy. This can be done from two different points of view. The problem can be considered from the over-all functional point of view of the effect on the total economy—that is, on savings, consumption, investment, national product, the general credit situation, etc. Or it can be considered from the particularized viewpoint of the effect on individual sectors of the economy such as issuers of securities, other users of long-term credit or equity funds, etc.

In regulating stock market credit both points of view need to be taken into account, and each decision has to be weighed with both in mind. The implications and significance of each viewpoint will necessarily vary in different circumstances. It is useful, however, to outline in a general way both the over-all and the particularized effects of regulatory action.

Over-all effects in the economy.—From the over-all point of view the initial impact of an increase in stock market credit is to increase the national product (total national production expressed in current prices) by increasing investment and the money supply. If manpower, facilities, and materials are available, these increases can find outlet in the form of increased physical volume of production. If they are not available, the increases in the dollar figures for investment, money supply, and national product tend to represent increases in prices rather than in physical production. That is one way of describing inflation.

The initial impact of a change in stock market credit—whether operating positively on the upside or negatively on the downside—is reflected in amplified form throughout the economy. This is because any given increase in consumer or investment expenditure in any field, with accompanying increase in the money supply, results in a multiple addition to the national product as the increase in total demand moves throughout the economy over a period of time, as it leads to amplified investment in particular directions, and as it also leads to still further credit and monetary expansion to meet and finance the increased investment as well as the increased total demand. The magnitudes of these results will necessarily vary under different circumstances. In general, the results usually are desirable to the extent that they increase production and employment and undesirable to the extent that they merely increase commodity prices. Even if increased stock market credit results in increased production and employment, however, the growth may be unsound and likely to lead to a reversal if it is not supported by more permanent forms of economic demand.

From the over-all point of view, it will be seen that regulation of stock market credit can be a significant means of combating inflation and thereby also removing a cause of deflation. It may also be to some extent an aid in cushioning deflation. The credit provisions of the Securities Exchange Act recognize the tendency of increasing stock market credit to increase activity for better or for worse throughout the economy. Section 7 (b) of the Act, in authorizing the Reserve Board to reduce margin requirements from those outlined as a guide in the Act, states that the Board may prescribe such lower requirements "as it deems necessary or appropriate for the accommodation of commerce and industry, having due regard to the general credit situation of the country." This is a close paraphrase, almost a quotation, of the standard specified in Section 12A (c) of the Federal Reserve Act for governing open market operations of the Reserve System.

Particularized effects in the economy.—From the particularized point of view, it is important to look again at the first effect of increased stock market credit mentioned above—the encouragement of the flotation of stocks, especially of stocks that are publicly traded.

To the extent that this encourages equity rather than debt on the liability side of corporate balance sheets it is generally regarded as desirable—although it must be remembered that the stock market credit supporting the operation is itself debt that is payable on demand and highly unstable.

There has been considerable discussion of whether or not the stock market "absorbs" credit, whether it reduces the funds available to other parts of the economy. Except perhaps in the most extreme stages of a hysterical boom, money that is put into the market by buyers is taken out by sellers and moves out into the economy so that there is no net "absorption" by the market itself in the sense of a reduction in the total quantity of money flowing through the economy. Indeed, as indicated earlier, by tending to expand bank credit and activate money balances, an active stock market may actually increase the effective money supply.

But to say that the quantity of money is not reduced (or is even increased) is not to say that its *availability* remains unchanged. Actually, the stock market is more like a channel than like either a sink or a sieve. An increase in stock market credit can sometimes represent a diversion of the flow of funds away from bonds, mortgages, short-term loans, or Government securities. To the extent that it does represent such a diversion, it increases the advantage of those users of capital that can finance by floating stock as against those that cannot. Prominent among the latter are home builders, farmers, small businesses, and the Government (since it issues interest-paying obligations and not stocks).

In practice, the Federal Reserve might not be in a position, in fact probably would not be, to undertake to increase the credit and money supply enough to provide for the latter groups the flow of funds that had been diverted from them. This is not because it would be technically or mechanically impossible to do so, but because such an increase might cause the total quantity of money in the country to become excessive—in other words, might set off or accentuate an inflationary spiral.

In summary, it can be said that—except when manpower, facilities, and materials are available to increase physical production—a significant particularized effect of an increase in stock market credit is to divert the flow of funds toward publicly traded stocks and away from other investments such as bonds, mortgages, short-term loans, and Government securities.

Restraining inflation.—The discussion above indicates some of the more important economic considerations that would apply under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question F-33. Since the question specifically states that it deals with a situation that presents a problem of "restraining inflation," some degree of restraint on stock market credit probably would be in order under each of the four assumptions stated in the question because of the need for preventing monetary expansion. It is unlikely that much if any increase in such credit should be allowed, and some reduction might be required. The amount of credit needed for the continued functioning of the stock market on a reasonably stable basis in such circumstances may be relatively small.

The exact degree of restraint that would be most appropriate would depend on a number of factors such as the extent of the inflationary pressure that must be combated; the aid that could be obtained from other instruments such as fiscal policy, other selective credit instruments, and general credit instruments; and the extent of the adverse particularized effects of the restraint on industries seeking to float stock issues. As a general proposition, the amount of restraint needed on stock market credit would tend to be somewhat less if the Treasury did not need to borrow substantially for new money or refundings than if the problem of avoiding diversion of funds from Treasury financing were added to the problem of fighting inflation.

The problem in case of total war might be considerably different from that in other circumstances. One cannot be certain in advance what the credit situation would be, but it is possible that at such a time a wide range of wartime controls—strictly applied and willingly complied with—might go far toward relieving the pressure, at least for the time being, on this particular area of the economy. That was somewhat the experience in World War II. It was not found necessary until February 1945 to raise margin requirements above the level that had been in effect since 1937. Another increase followed in July 1945, and the further increase to 100 percent was not put into effect until January 1946, several months after VJ-Day.

There is no assurance that the World War II experience would be repeated in the event of another war. That experience, however, is a striking illustration of the interdependence of various parts of the economy and of various methods of combating inflation.

That experience illustrates, too, the fact that regulation of stock market credit is a supplementary instrument of credit policy—one of the means of making a broad credit and monetary policy effective. In most circumstances, the decision whether to follow a policy of restraint or of relaxation with this instrument would parallel similar decisions with the other instruments of credit policy. This would not always be the case, however. In view of some of the characteristics of this particular instrument as indicated above, there might be times when relaxation of it would be in order even though restraint were appropriate for one or more of the other instruments. Conversely, restraint might at times be desirable here even though relaxation were needed elsewhere. In short, each instrument of credit policy has its own characteristics and each should be used in such manner as to blend all the instruments into a harmonious whole for the maximum contribution to stable economic progress for the whole economy.

40. What do you consider to be the role of selective regulation of consumer credit in restraining inflation under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33? What attention should be given by the controlling authority to inventories and price and employment changes in the particular industries affected by the regulation? Discuss the operation of Regulation W since its revival in the fall of 1950.

(Assumptions in Question F–33 are as follows: Restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future, (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future, (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and(*d*) under conditions of total war.)

The Board of Governors is presently responsible for the regulation of consumer credit under specific, temporary, and limited authority contained in the Defense Production Act of 1950, as amended. This is the third time this type of regulation has been tested during three separate periods in the past 10 years. The most recent experience has provided a more effective test of practical feasibility of such regulation than resulted from either preceding experience. Viewed against the long history of credit and monetary management, however, it is still premature to pass judgment on the feasibility of selective regulation of consumer credit as a continuing instrument of reserve banking policy. Any present views must necessarily be tentative.

The first portion of this question is not explicitly related to the present authority, but rather implies an unqualified authority to regulate consumer credit under four assumptions with regard to the magnitude of Government borrowing—in other words, without regard to existing statutory limitations. Accordingly, this reply does not include any special qualifications to take account of existing statutory considerations. The discussion which follows includes, first, an explanation of the relation of consumer credit to economic stability and of the role of consumer credit regulation as an anti-inflationary restraint. Then, some of the criteria which may be used in the application of consumer credit regulation are analyzed. Finally, there is a description of the operation of Regulation W since its revival in September 1950.

Relation of consumer credit to economic stability.—The orderly, long-range expansion of consumer credit has been, and is, a necessary and desirable means of promoting a higher standard of living, especially because of its association in this country with the mass production and distribution of consumer durable goods. The consumer credit area has become a strategic one both because of its size and volatility and because of the point at which it provides purchasing power.

At the end of October 1951 the total amount of consumer credit outstanding was estimated to be 19.5 billion dollars. Of this amount, 13.2 billion (or roughly two-thirds) was in the form of installment credit. Credit extended on charge accounts made up the major portion of the remaining 6.3 billion dollars of noninstallment credit which also includes single-payment loans and service credit. The economic importance of consumer installment credit is indicated by the fact that approximately one-half of the 29 billion dollars spent on consumer durable goods during 1950 was financed by this method. The economic impact of these purchases, which starts in the durable goods markets, is eventually felt throughout the economy as these expenditures flow through industry and back into incomes and are spent again.

Expansion in consumer credit adds directly to the growth of bank credit and by this means to the money supply. A substantial part of the consumer credit outstanding is financed either directly or indirectly by bank loans. In addition to the consumer loans made directly by banks, a large part of the funds of sales finance and personal loan companies is obtained from bank sources, and a great many retail establishments finance their receivables partly through borrowing at banks. Thus, a substantial part of every dollar of additional consumer credit ordinarily stems from bank credit expansion and represents a direct addition to the total number of dollars competing for an existing supply of goods and services. To the extent that nonbank lenders sell Government securities to finance an expansion of their consumer credit balances, this also affects the money supply directly or indirectly. Of equal importance from the standpoint of monetary stability is the fact that the operations of bank and nonbank lenders in this credit area influence the activity or turn-over of money. An expansion of consumer credit, accordingly, affects both the money supply and its circulation.

Insight into the part played by consumer credit expansion during the 1949–50 bank credit expansion may be found by comparing changes in consumer credit with changes in other types of credit. In the 12 months ending June 30, 1950—roughly the year preceding the outbreak of hostilities in Korea—data for all insured commercial banks show that commercial loans expanded 522 million dollars; agricultural loans, 85 million; real estate loans, 1,383 million; and consumer loans, 1,592 million. The consumer loan total shown here does not reflect the indirect support given by banks to this area in the form of commercial loans to sales finance companies and other nonbank consumer lending institutions.

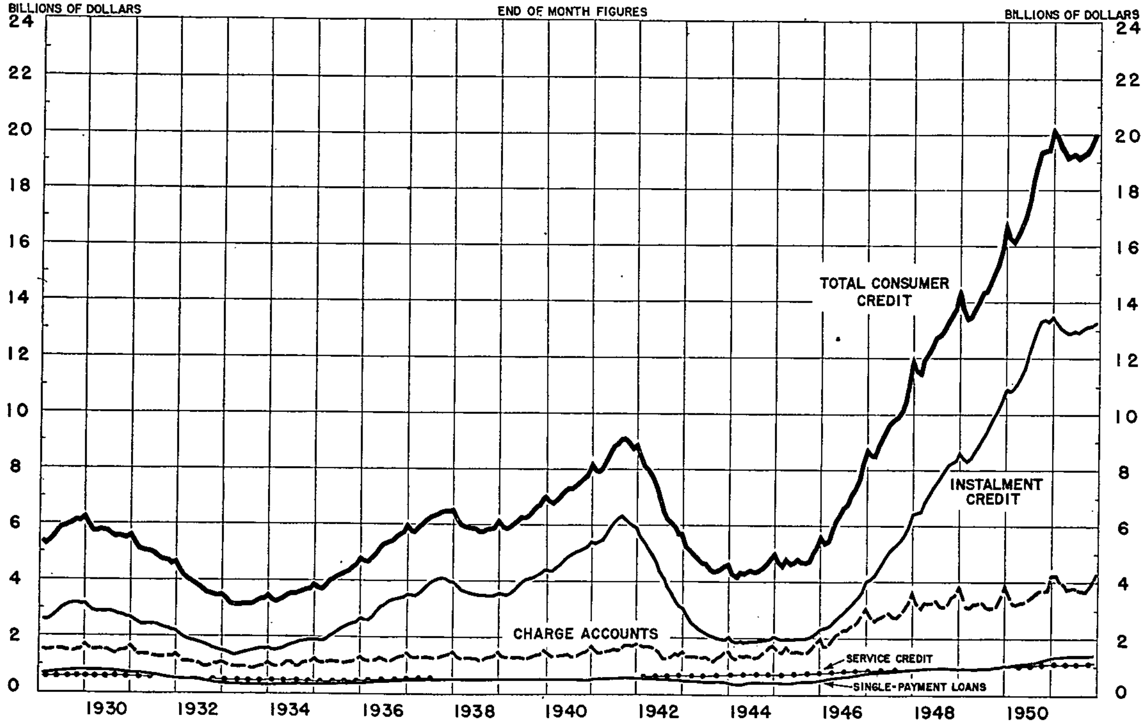
Over the years there have been wide fluctuations in the volume of consumer credit outstanding, as shown in Chart 11. Balances have ranged from a prewar high of 9 billion dollars in 1941 to a low of 4 billion in 1944, and to a postwar peak of just over 20 billion at the end of 1950. These wide fluctuations have reflected primarily changes in *installment* credit which in turn have been correlated with variations in the purchasing of consumer durable goods. In the period 1948–50, for example, noninstallment credit increased 1.2 billion dollars while installment balances rose 7 billion.

The general role of consumer installment credit in economic fluctuations can be described briefly as follows. When incomes rise in the

Chart 11

CONSUMER CREDIT OUTSTANDING

FEDERAL RESERVE ESTIMATES



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

upswing of the cycle, demand for and extensions of installment credit increase, with the result that the expenditures of people increase more rapidly than their income. When incomes shrink in the downswing of the economic cycle, demand for and extension of credit decreases and outstanding installment balances contract. In order to pay off debt, people are forced to cut back their expenditures more than if they had not incurred debts in the upswing. This expansion and contraction of consumer debt as shown in the preceding chart is a significant factor in fluctuations in bank credit and the money supply.

The generalization to which this description leads is that fluctuations in installment credit accentuate cyclical swings in consumer expenditure and hence in economic activity. This cause and effect role of consumer credit in economic fluctuations is in many respects similar, of course, to that of other credit, producer credit included, but, as pointed out later, continued expansion of consumer credit in periods of strong inflationary boom has a significance somewhat different from that of producer credit.

From this brief discussion it is clear that the consumer credit area is of substantial importance in the economy.[62] The restraint of this area in times of severe inflationary pressures can be a salutary stabilizing influence. On the other hand, in a period when deflationary factors are at work, stimulation of this type of credit can expand immediate purchasing power in the hands of consumers and contribute to economic recovery. In the past the Government has encouraged the expansion of this type of credit as well as restrained it. The Federal Housing Administration plan for insuring certain types of credit for home improvement and repair is an example of the way in which the insurance of loans made on relatively liberal terms can be used to stimulate credit extensions under particular economic conditions.

Role of consumer credit regulation as an anti-inflationary restraint.—Consumer credit functions at a point in the economy and in a manner that tends to make it relatively unresponsive to the effects of general credit instruments. For this reason selection of this credit area for regulation provides a helpful supplement to the general measures.

Consumer credits are extended on a retail basis, that is, on relatively standardized terms and charges to consumers generally. Much of the demand for this type of credit is related to the need for, and purchase of, durable goods. Credit extensions to businesses of various types, in contrast, are on a wholesale basis and the terms and conditions on which they are usually made are individually tailored. Routinized methods of credit appraisal and collection for consumer credit, relatively uniform terms and charges, and close relationship of much of this credit with retail purchases, and a background of tested credit experience tend to make this credit less susceptible to influence by general credit measures than is the case for business and some other types of credit. When bank credit generally becomes less available in the money market, consumer credit because of its close relationship with retail purchases and its excellent performance record may command a larger proportion of the available supply. Moreover, small changes in interest rates in the money market

[62] For an extended discussion of this subject, see Gottfried Haberler, Consumer Installment Credit and Economic Fluctuations, National Bureau of Economic Research, New York, 1942; also, Rolf Nugent, Consumer Credit and Economic Stability, Russell Sage Foundation, New York, 1939.

have relatively little effect in the consumer credit area since the cost of money at wholesale is only a small element in the credit charge to consumers at retail. Another consideration is that in the case of installment credit, consumers are concerned primarily with the total amount of monthly payment they must make. The portion of this monthly payment which is necessary to cover the lender's or retailer's cost of money at wholesale is very small.

The use of consumer credit, particularly installment credit, is based largely on the level of current income and on the anticipation of future income; in inflationary periods when incomes are rising, consumer willingness to incur debt is strong. In the absence of regulation, as a consequence, the times when consumer credit is likely to expand are the times when it is likely to be necessary to limit credit through the application of general instruments of credit restraint.

For this reason, the regulation of consumer credit has special significance in periods of short supply and of limited production, as in the current emergency period. Operating as it does at the end of the production-distribution chain, the extension of credit to facilitate consumer buying takes goods off the market, further depleting an already shortened supply, and putting additional pressure on the remaining units in supply. In this limited sense, consumer credit is more directly inflationary than types of credit extended to produce such goods or to build up or maintain inventories of raw materials and goods in process.

Thus, the unregulated expansion of consumer credit adds to general inflationary pressures and might actually require a more aggressive use of general credit instruments than would otherwise be necessary. That is to say, in the absence of selective regulation of consumer credit, other means of credit restraint might have to be exercised more restrictively in order to bring about sufficient restraint on the over-all expansion of private credit. This emphasizes the desirability of being able to use selective credit measures to complement, but not to substitute for, over-all or general credit measures, the extent of such use depending on prevailing economic circumstances. One of the primary justifications for the selective regulation of consumer credit is that it helps to avoid too strong effects on segments of the economy that are more sensitive to general credit actions.

The extent and nature of Treasury financing—the basic frame of reference for this question—is one important element in the complex of factors which determines whether the economy as a whole is in balance or subject to inflationary or deflationary pressures. If inflationary pressures dominate the economic outlook, selective regulation of consumer credit can be used as a supplement to general monetary and fiscal measures.

There is an additional relationship between consumer credit regulation and Treasury borrowing. Any effective restraint on the demand for private credit, and especially bank credit, provides a certain protection for, or assistance to, the Treasury in meeting its refinancing and new financing needs. As a general proposition, the more vigorous private demands for credit are, especially considering the upward flexibility of interest rates which lenders may charge in some areas in responding to private credit demands, the greater the difficulties encountered in fixing the terms of, and in placing, Treasury issues.

An expansion of the consumer credit balances of nonbank lenders is financed either through the raising of additional capital funds by drawing on various forms of savings or—as indicated earlier—directly or indirectly by an expansion of bank credit. To the extent that the money supply in the form of bank deposits is thus increased, inflationary pressures are compounded by the addition of these dollars to the spending stream. To the extent that savings are drawn upon to finance expansion, this impinges on the savings resources the Treasury can tap for its needs.

Conversely, a reduction in consumer credit balances, and particularly installment credit outstanding, involves an increase in saving out of current income. Because of the automatic amortization feature of an installment contract, a reduction in outstandings will take place if credit terms are tightened even though there is no change in sales volume. For example, on a given level of sales a curtailment of maturities from 24 months to 18 months will automatically bring about a reduction of roughly one-fourth in credit outstanding over a period of two years. Again, assuming a constant level of sales, an increase in down payment requirements will gradually reduce the total credit outstanding. Considering also the effect on sales volume, it becomes apparent that regulation of consumer credit can have a material effect on the amount of saving out of current income.

It follows that if the amount of consumer credit outstanding is increasing at a time when the Treasury is actively in the market for funds, the Treasury is placed in a position where it must compete more aggressively for the available supply. Under the varying circumstances posed in this question the greater the burden of Treasury financing, as in total war, the greater is likely to be the need for restraining the use of credit in the consumer area.

Criteria for consumer credit regulation.—The principal criterion determining the amount or degree of restraint to be achieved by anti-inflationary measures of all kinds is the extent of general inflationary pressures in the economy as a whole. In the summer of 1950, for example, activated by an international crisis, this country embarked on a long-range defense program which appeared certain to involve eventually expenditures running into the hundreds of billions of dollars. Coming at a time when the civilian economy was operating at close to capacity, the situation was quite unlike that in 1940 and early 1941 when there was sufficient slack to absorb much of the defense effort. Inflationary forces which had dominated the economy in the months before Korea were multiplied. The outlook for increased consumer incomes at a time when more and more labor and materials were to be diverted to the defense program focused attention on an inevitable gap between consumer demands and available supplies of goods and services at prevailing prices.

Under such conditions, curbing the resultant inflationary pressures called for vigorous use of fiscal and credit and monetary measures. In the field of consumer credit this indicated a need for invoking a regulation capable of restricting demand to a level commensurate with a sustainable volume of consumer goods production.

Study of this credit area over a considerable period and experience with its regulation under both war and peacetime conditions indicate that, except under conditions of all-out war, the possible anti-inflationary benefits to be obtained by including all or most forms of non-installment consumer credit (charge accounts, single-payment loans, and service credit) are too small to justify the cost and annoyance to the trade and the increased administrative burden on the Government. Even for many articles bought on installment, it appears that the anti-inflationary effects are relatively minor in relation to the inconvenience to the trade and the administrative difficulties.

From another point of view, the importance of avoiding unnecessarily harsh and inequitable restrictions on one industry or segment of the economy must be fully recognized. With regard to that part of the question concerning the attention to be given to inventories and price and employment changes in the particular industries affected by the regulation, there is no doubt that terms must be set with due consideration for these factors. This is necessary so as to avoid as far as possible discrimination against such industries in carrying out the objectives of credit policy.

There are other reasons from the standpoint of credit policy for close observation of supply-demand conditions in the markets for the articles selected for regulation. Consumer durable goods industries are of strategic importance in connection with the restraint of inflation and the promotion of economic stability. These industries not only represent a substantial part of the economy, but they are particularly subject to unstabilizing fluctuations in demand because consumer durable goods purchases are especially susceptible to postponement or acceleration. Further, they are the segments of the economy most immediately affected by defense production programs.

Assuming inflationary pressures to be very strong, the chief immediate objective of the regulation may be not only to curb the expansion of installment credit outstanding, but also to reduce the amount outstanding. This might easily coincide with a time when there was need to conserve credit resources as an aid to Treasury financing. Transition from high peacetime production of durable goods to large-scale production of armaments must inevitably create problems of adjustment. Especially if there is an effort to make this transition rapidly, there is likely to be a brief period when both plant capacity and available manpower are not fully utilized. The same circumstances inherent in a rapid transition from peacetime to wartime production would be likely to require relatively restrictive terms on installment sales of consumer durable goods. Such terms facilitate the transfer of workers to essential defense production and encourage manufacturers to seek defense contracts. The fact that some increase in inventories takes place and that employment in consumer durable goods industries is temporarily less than otherwise might be possible does not necessarily warrant a conclusion that credit terms are too restrictive. Under the assumption stated, it must be anticipated that workers will be rapidly absorbed in defense production and any excess inventory of regulated articles, except that stemming from major business misjudgments, will be liquidated as production is curtailed by limitation orders and capacity is shifted to defense production.

Inventories, prices, and employment changes in the particular industries affected by the regulation must be given serious consideration by the administrative authority. They must be evaluated, however, in relation to the total economic situation and particularly in relation to prospective developments that are likely to arise as a result of shifts in the utilization of materials and manpower in transitional periods.

Operation of Regulation W since September 1950.—The regulation of consumer installment credit reissued in September 1950 under the authority of the Defense Production Act has been an integral part of the program for curbing inflationary pressures. From October 1950 through July 1951, Regulation W limited effectively the expansion of consumer purchasing power in the form of credit dollars, thus restraining further upward pressure on prices from that quarter.

In July and August 1950, while Congress was considering the Defense Production Act, inflationary developments in the field of consumer installment credit were significant. Between the end of June and the end of September 1950 this type of credit was expanding at an annual rate of nearly 5 billion dollars. Anticipating on the basis of the proposed legislation that it might have responsibility for regulating installment credit, the Board and its staff and the Federal Reserve Banks held extensive consultations with trade groups at the same time that Congress was considering the legislation.

The Board was thus prepared to reissue Regulation W on September 8, the same day that the law was approved by the President. For reasons stated earlier, the scope of the regulation was limited to the major sources of installment credit. It is estimated that about three-fourths of the present total of 13 billion dollars of installment credit represents transactions within the scope of the regulation. Moreover, for much of the installment credit not presently regulated, the customary and prevailing terms in the trade are more strict, particularly with regard to maturities, than those now provided by the regulation.

The terms initially effective, on September 18, 1950, were only slightly more restrictive than the average terms prevailing in consumer markets in the period just preceding the regulation. In announcing them the Board indicated that further tightening might be in order as the magnitude of the defense program and resulting inflationary presures became more evident. Accordingly it announced, effective October 16, 1950, a tighter set of terms which remained in effect until July 31, 1951. The attached table (Exhibit G, p. 418) shows the minimum down payment and maximum maturity provisions of the regulation in effect from September 18 to the present on each of the different categories of credit covered by the regulation.

The administration of Regulation W is decentralized among the 12 Federal Reserve Banks and their 24 branches which serve the registrants in their respective areas. A small Regulation W staff at the Board of Governors is responsible for the coordination and supervision of the activity at the Reserve Banks. About 180,000 individuals and corporations have registered with the Reserve Banks as doing installment credit business subject to the regulation. These include approximately 40,000 financial organizations and 140,000 retail or dealer outlets.

Approximately two-fifths of all registrants were contacted and examined during the period September 18, 1950–December 31, 1951. As a result of the investigations of registrants, a total of 75 cases through December 31 had been referred by the Federal Reserve Banks to the Board of Governors for disciplinary action. Twelve injunctions enjoining further violations had been issued by United States District Courts and three administrative hearings had been ordered, two of which led to the temporary suspension of the registrants' licenses to engage in installment credit operations. In 25 instances the nature of the violations of the regulation has resulted in the Board's referring the case to the Department of Justice for action in accordance with Section 603 of the Defense Production Act of 1950. In 8 cases no further action by the Board was then contemplated.

Under the terms of Regulation W in effect from September 1950 through July 1951 the inflationary expansion of outstanding installment credit came to a halt. In this 10-month period there was a net decline of 441 million dollars in installment credit outstanding. This decrease contrasts with an expansion of 2.7 billion dollars in this type of credit during the corresponding period from September 1949 through July 1950.

During the late spring and early summer of 1951 there was a noticeable decline in demand for consumer durable goods from the exceptionally large volume of purchases in December and January and in the summer of 1950. This reduction in demand reflected in part the restrictive terms of Regulation W and also a natural reaction from the heavy volume of consumer buying during the earlier periods. With physical output of most consumer durable goods maintained at levels in excess of current buying, there was substantial accumulation of inventories in the second quarter of 1951. In the face of strong underlying inflationary pressures, of cutbacks in production to be required by the defense program during the last half of 1951 and in 1952, and of the continuing high level of consumer income, the apparent temporary nature of the general inventory situation did not seem to the Board to be of such proportions as to warrant a relaxation of these credit restrictions.

The regulation was changed, however, on July 31, 1951, to give effect to the limitations on the Board's authority to establish minimum down payment and maximum maturity requirements imposed by the Congress in the Defense Production Act Amendments of 1951. The change in terms has been followed by a resumption of the expansion of consumer installment credit. In the 5 months August–December, outstanding installment credit increased 585 million dollars.

Exhibit G

Minimum down payments and maximum maturities under Regulation W

Listed articles and loans	Minimum down payment [1] (percent)			Maximum maturity (months)		
	Sept. 18–Oct. 15, 1950	Oct. 16, 1950–July 30, 1951	July 31, 1951–	Sept. 18–Oct. 15, 1950	Oct. 16, 1950–July 30, 1951	July 31, 1951–
Listed articles:						
Passenger automobiles	33⅓	33⅓	33⅓	21	15	18
Major appliances [2]	15	25	15	18	15	18
Furniture and floor coverings	10	15	15	18	15	18
Home improvement materials, articles, and services [3]	10	10	10	30	30	36
Loans:						
To purchase listed articles	(4)	(4)	(4)	(4)	(4)	(4)
Unclassified	----------	----------	----------	18	15	18

[1] For automobiles, payable in cash, trade-in or both; for other listed articles, payable in cash from Sept. 18, 1950, to July 30, 1951, and in cash, trade-in or both from July 31, 1951. Exempted from down-payment requirements: Sept. 18–Oct. 15, 1950, listed articles costing less than $100; beginning Oct. 16, 1950, those costing less than $50.

[2] Includes radio and television receiving sets, phonographs, refrigerators, food freezers, cooking stoves, ranges, dishwashers, ironers, washing machines, clothes driers, sewing machines, suction cleaners, room-unit air conditioners, and dehumidifiers.

[3] Includes heating, plumbing, and other household fixtures.

[4] Requirements same as on installment sales of the respective articles.

41. What do you consider to be the role of selective regulation of real estate credit in restraining inflation under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33? Discuss the operation of selective regulation of real estate credit during the past year.

(Assumptions in Question F-33 are as follows: restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and (*d*) under conditions of total war.)

The existing temporary authority for the selective regulation of real estate credit was granted to the President under the Defense Production Act of 1950, and was continued and amended during the summer of 1951. This authority is limited to credit for new construction and is otherwise subject to statutory limitation. The authority exercised by the Board of Governors of the Federal Reserve System was delegated to it by the President with the proviso that the concurrence of the Housing and Home Finance Administrator should be obtained in any regulations issued pursuant thereto which applied to residential real estate. This is the first time, it is believed, that an attempt has been made either in this country or abroad to restrain an inflationary expansion of real estate credit through a comprehensive regulation of mortgage terms. While the experience to date has been reasonably encouraging in view of the uncertainties involved in any new approach, it is too early to pass judgment on the technical limits within which regulation of this type may be expected to be effective.

The first part of the question implies unqualified authority to regulate real estate credit under four inflationary assumptions—in other words, without regard to existing statutory limitations. Accordingly, the reply to this part of the question generally leaves out of account special qualifications otherwise required because of statutory considerations. The latter part of the reply, which discusses selective regulation of real estate credit during the past year, takes account of the limitations on authority to regulate imposed by the Defense Production Act as enacted and subsequently amended. Inasmuch as any adequate answer to the question calls for an understanding of the economic background of real estate and building activity, the beginning section of this answer briefly sketches the more significant characteristics of the realty and construction markets.

Nature and importance of real estate.—Real estate is widely held by individuals and business organizations. Hence, real estate values have a far-reaching influence on American families and businesses. Nearly 24 million houses are owned by their occupants, and a large proportion of the 19 million houses and apartments occupied by tenants are owned by families and individuals of moderate means. A substantial amount of commercial property is also widely owned. As security for mortgage debt, real estate is an important element in the solvency and liquidity of many financial institutions and individuals.

Changes in demands for real estate have produced wide fluctuations in real estate values, in rents, and in the soundness of mortgage investments. These fluctuations have a profound influence on people's feelings of security and attitudes toward risk-taking. Changes in demands for real estate have also given rise to wide swings in building activity, with accompanying large changes in construction employment, in production of many materials, and in use of credit. As a result, there have been periods when price and wage pressures, disruption of supply channels, and distortions in financing activities attributable to instability in real estate and construction have been sources of general instability, with serious effects on the whole economic life of the nation.

In large part the instability of real estate and construction activities derives from the nature of the product and the demand for the product. Construction differs conspicuously from other economic activities in that the product is used up very slowly and can be substantially altered, structurally and functionally, at small cost in relation to total value.

Partly for these reasons, the aggregate demand for real estate facilities is highly volatile, and changes in aggregate demand have an accelerated effect on the demand for new construction and hence a much greater effect on output and prices. Because of the adaptability of existing stocks of real estate facilities, there are frequent periods when the need for new facilities can be postponed for a long time, and in any period all but a very small part—seldom less than 97 percent—of current demand for the use of real estate facilities is satisfied by the use of these existing stocks. For example, in the boom building year 1950, when 1,400,000 new units were started, these new units accounted for only about 3 percent of the units in use.

Thus, when total demand for the use of real estate facilities declines from a high level by as little as 5 percent, which in many other lines would be regarded as a small decline, additions to stocks—that is, new construction—may drop off very sharply. Similarly, a 5 percent increase in total demand from a high level, which might also be regarded in some other lines as small, may mean a need to double or triple the rate of new construction. Since this cannot be achieved rapidly, the market impact tends to be a sharp increase in the value of existing facilities.

Such wide variations in construction and values, stimulated by fairly small variations in total demand, are an important source of instability in the economy. When demand for real estate facilities is high, real estate values ordinarily rise rapidly and construction activity accounts for an increasing proportion of the gross national product and of national income. When aggregate demand declines, even moderately, real estate values and construction activity are likely to fall substantially. For example, in 1928, when real estate demand was high, values were high and construction accounted for 12 percent of the gross national product of 98 billion dollars. By 1933, when real estate demand was low, values had fallen by a third, and construction accounted for only 5 percent of the gross national product of 56 billion dollars. In the very active year 1950, values were at record high levels, and as much as 10 percent of the national product of 283 billion dollars was construction. In 1939 dollars, the change in the volume of construction activity was from 11.2 billion in 1928 to 3.3 billion in 1933 and 12.7 billion in 1950.

In periods of high activity, construction uses many services, a large volume of fabricated goods and materials, and a substantial amount of credit. Large construction volume is also likely to encourage workers to train for the construction trades, and manufacturers and distributors to enlarge capacity. High real estate activity, with rising values, induces lenders to extend credit for real estate transactions and for construction, and attracts new savings to lenders doing this business. At such a time, the rising value of real estate assets, together with the high level of current economic activity, helps to induce a feeling of well-being throughout the economy.

Furthermore, new buildings and structures are seldom complete in themselves. Factory, store, office, and school buildings need machinery, equipment, fixtures, and furnishings of a wide variety as well as utilities and other services before they are ready for use, and new houses and apartments are frequently newly furnished and equipped with durable goods. A large demand for new structures, therefore, is usually accompanied by decisions to purchase a large volume of other durable goods and services as well. Moreover, residential construction, particularly in new areas, opens up profitable prospects for enterprises such as stores, theaters, and other community facilities and frequently brings about installation of new streets, sewers, power and telephone lines, and the like.

When demand for real estate facilities declines, a substantial proportion of the personal, physical, and monetary resources used at the high level are unemployed. Unless alternative uses are found for these resources, this means an appreciable decline in national product and in national income. It also tends to mean a decline in the value of real estate assets, and since mortgage charges are ordinarily fixed, the lower incomes of real property holders means that a larger proportion of their income goes for payments on mortgage debt, leaving less for other things.

Both of these factors affect the outlook of property owners. If this low level of demand lasts long enough, prices of real estate may break with consequent ill effects on owners of real estate, mortgage lenders, and savers. In any case, continued absence from the market of the activities associated with a high level of aggregate demand for real estate facilities means reduction of income throughout the economic system, and a decline in demand generally. If conditions had been such that the decline in the amount spent on construction from 1928 to 1933, for example, had been much smaller, much of the distress of the later period would have been avoided.

Since the variations in total demand that give rise to the wide swings in current construction activity are relatively small, there is some reason to hope that public policy may be shaped to smooth out a part of the variations. If total demand could be restrained when it was large, thereby limiting construction and real estate booms, sharp changes in values, and overexpansion of the construction labor force, materials-producing industries, and mortgage debt, might be avoided.

If, in addition to limiting booms, underlying demands for real estate facilities could be stabilized at a high or rising level, the range of fluctuation in construction activities might be further narrowed.

Adoption of policies to stabilize economic activity generally is perhaps the most important single step that can be taken in this direction.

Real estate and construction activities rely heavily on credit and are markedly affected by the terms on which credit is available. Although selective regulation of real estate credit is generally regarded currently as a restrictive device, Governmental influence on the availability of real estate credit has been exerted, since the thirties, largely to stimulate real estate and construction activity.

If Governmental influence is used only to stimulate markets, regardless of economic and real estate conditions, it will contribute strongly to economic instability by encouraging real estate booms. Real estate credit terms, by themselves, are probably more effective in restraining or intensifying strong demand than in stimulating a demand that is too low, although this might not be so true if variations in demand could be kept within a narrower range. In the thirties, when demand was low, there was considerable delay before any substantial number of people took advantage of the relaxed terms. This lag was due largely to the condition created by previous overstimulation through unsound mortgage financing in the middle and late twenties which had given rise to unfavorable price, value, cost, and debt relationships. It took time for this situation to be corrected. During the past few years, however, when demand has been very large, successive liberalization of terms have further increased demand to the point of taxing productive capacity, and inflationary pressures have resulted.

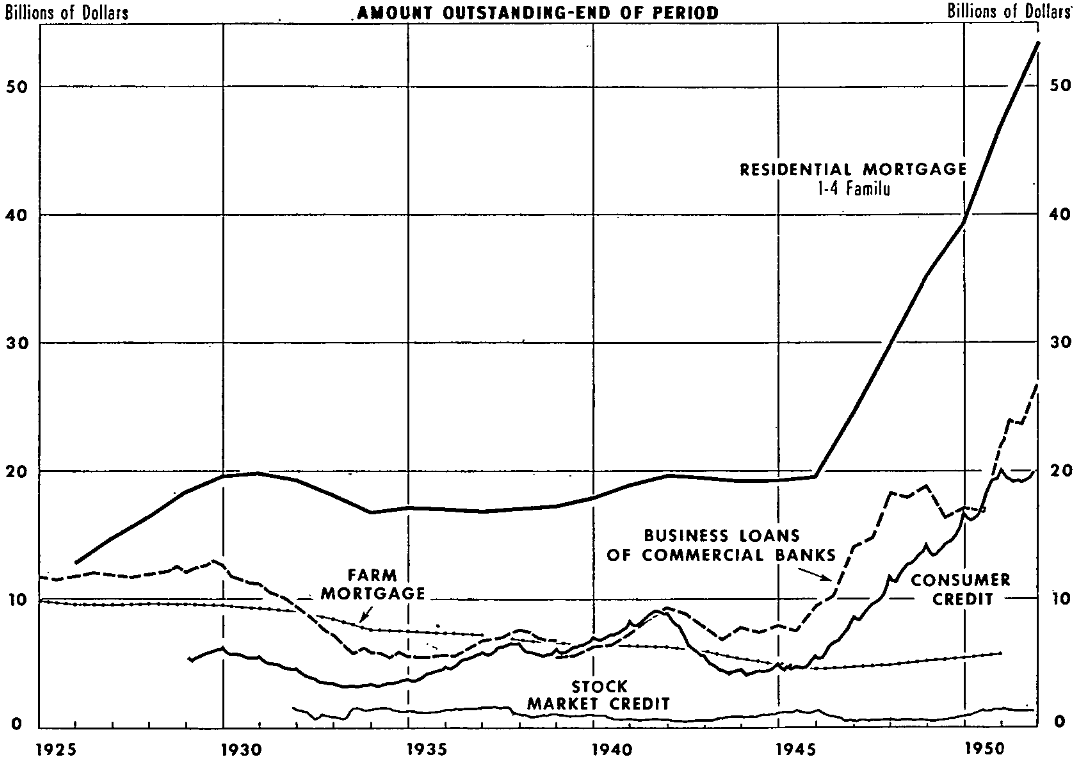
In the light of this background, the President, immediately after the Korean outbreak, directed Federal agencies administering real estate credit programs to tighten their regulations, and recommended enactment of the more general restrictive authority in the Defense Production Act. It is also in the light of this experience that the effectiveness of the Board's Regulation X relating to real estate credit and the associated regulations of the Federal housing agencies should be judged as an anti-inflationary device.

Real estate credit regulation as an anti-inflationary measure.—In important respects, real estate credit under current conditions has the features essential to effective selective regulation under appropriate statutory authority discussed in the answer to Question F–38. The volume of real estate credit extended is large compared with other types of credit and has grown rapidly in recent periods of inflationary pressures. Also, lending techniques are specialized and reasonably well standardized in terms of loan purpose and collateral procedures, borrower's equity requirements, and loan maturities, so that regulatory terms can be readily devised and applied. Experience shows that the flow of real estate credit is responsive to changes in credit terms and that regulation of such terms can help to reinforce general credit and monetary policy.

In the broadest context real estate credit includes a considerable variety of transactions. The bulk of the credit volume, however, is in mortgage loans on residential properties, and for this reason the regulations which have been issued and the discussion which follows deal primarily with this part of the total. Similar principles apply to other segments of the real estate credit area, except perhaps for loans related to industrial facilities, where the problems are closely

CHART 12

SELECTED TYPES OF PRIVATE DEBT



NOTE.—Sources: Home Loan Bank Board, Federal Reserve Board, Department of Agriculture, and New York Stock Exchange. Residential mortgage debt on one- to four-family houses at end of year, with 1951 figure estimated by Federal Reserve.

related to those of other business borrowing. As stated in the reply to Question F-38, studies to date by the Board of Governors have not developed a feasible approach to the selective regulation of business credit.

Throughout the postwar period credit extended on residential real estate in this country has expanded very rapidly, more rapidly in fact than in any other span of comparable length in the nation's history. The amount loaned for the financing of new construction and on the security of existing structures, both for purchase and for other purposes, has been considerably larger than the amount of previously contracted debt repaid. Thus, loans outstanding on one- to four-family houses, as shown on Chart 12 above, have increased since the end of World War II from about \$19 billion to over \$53 billion at the end of 1951—an increase of over \$34 billion or about 175 percent. Almost \$8 billion of this increase came in 1950, and another \$6½ billion in 1951. The rise in gross lending on these residential properties was from an average of over \$800 million per month in 1946 to an average of about \$1.5 billion per month in the last half of 1950. In 1951 the rate was slightly lower—about \$1.3 billion per month.

The institutional organization for lending on residential real estate lends itself to the regulation of credit terms. In recent years about two-thirds of the amount of credit extended for the purchase of new houses and almost one-third of the amount extended for the purchase of old houses has been under the insurance or guarantee programs of the Federal Housing Administration and the Veterans Administration, and restrictive credit regulation can be incorporated into these programs. The bulk of the remainder has been extended primarily by banks, insurance companies, savings and loan associations, and other lending institutions which are already subject to supervision and regulation either by the Federal Government, the State governments, or both, and from which a workable degree of understanding and cooperation can be expected in administering a regulation.

A very high level of real estate lending has inflationary effects in several ways. By stimulating and supporting rapid expansion in real estate transactions and in building activity, it makes possible the large rises in real estate values, pressures on prices and wages, disruption of supply channels, and distortions in financing activities referred to in the previous section. This in turn results in strong pressures to divert resources from other parts of the economy to real estate, building, and related activities. Furthermore, at a time when total demands for credit are large relative to the volume of current saving, expansion of lending of any type is likely to be inflationary by increasing the volume and velocity of money. As far as possible in such a situation, general credit measures should be used to limit the total expansion of credit so that expansion of a particular type of credit can take place only by reduction of other types. However, for various institutional reasons, such as the large accumulation of savings by organizations having a strong preference for mortgage investments, selective credit regulations can serve as a helpful supplement to general credit instruments in limiting inflationary pressures in real estate and related markets.

Since the war, lending on real estate mortgages has contributed strongly to an increase in the total volume of credit and money. This has come about in three principal ways:

First, commercial bank investment in mortgage loans is large and has increased substantialy in recent years. Since the end of World War II, commercial banks have increased their holdings of mortgage loans by nearly $10 billion.

Second, the high level of building activity in recent years has been supported in part by Federal funds—for example, by about $1.8 billion of net purchases by the Federal National Mortgage Association and over $100 million of direct loans by the Veterans Administration. While Federal cash receipts exceeded expenditures during much of this period, the absence of Government participation in mortgage financing would have enabled Federal fiscal policy to play a more important anti-inflation role than it did.

Third, and much more significant in aggregate effect, important nonbank lenders have sold a substantial volume of Government securities to the banking system to obtain funds for mortgage lending.

This shifting out of investment in Government securities on the part of life insurance companies and other lending institutions has been a particularly important factor in credit and monetary developments in recent years and, to the extent that the securities sold were absorbed by commercial banks, has produced the same inflationary results as bank lending. When the shifting took the form of sales of Government securities to the Federal Reserve Banks, as a large part of it did in 1948 and again in 1950 and early 1951, the result was doubly inflationary, in that it not only increased the volume and velocity of money directly but also provided the basis for secondary credit and monetary expansion through its expansionary effect on Reserve Bank credit and bank reserves. From the data available it appears that several billions of the dollar increase in real estate mortgages outstanding from 1945 to 1951 was financed by sales of Government securities to the banking system.

In this framework, the relationship of real estate credit regulation to the magnitude of Government borrowing appears in clearest focus. The volume of real estate credit extensions and all other credit extensions has a direct bearing on the volume of savings available for noninflationary Treasury financing. At any time, restraints on real estate credit can operate as a brake on one factor affecting the rate of private spending. In a period when the Treasury is not expected to borrow substantially, the appropriateness of such restraints would be determined largely by conditions in real estate and construction markets and by whether or not the total private demands for mortgage credit, given the most effective use feasible of general credit measures, exceeded available savings being channeled into this market. When the Treasury is in the market for either refunding or new money, the selective limitation of real estate credit has the added effect of restraining one competitive demand for savings, thereby facilitating Government financing through the least inflationary channels.

The importance of real estate credit regulation among the factors influencing the Government's financing depends on the effectiveness of general credit instruments, the degree of restrictiveness of the regulation, and the amount of real estate financing which would go forward in the absence of such regulation. If the volume of new construction and real estate transfers would otherwise be high—comparable to the levels of the years 1948–51, for example—and the restraints imposed were relatively tight, it is conceivable that the smaller amount of mortgage per transaction and the smaller number of transactions might reduce by several billion dollars the amount of savings absorbed by construction and real estate transfers.

Broad economic and social considerations tend to impose limits on the use that can be made of real estate credit restraint as an anti-inflationary device. Many people strongly hold that, since shelter is one of the basic necessities of life, the extent to which real estate credit should be restrained as a part of an anti-inflationary program, or specifically to facilitate Government financing, must always be judged in the light of such fundamental considerations as the adequacy of existing housing in relation to the basic shelter needs of the population and the importance of maintaining the homebuilding industry. Moreover, the pattern of new construction, i. e., the distribution of dwelling units by price class, size, and type of financing available, is a matter of interest and concern for reasons unrelated to credit regulation. During a war period when the very existence of the nation is at stake, these views may be subordinated. For example, during World War II, mainly because of the very acute shortage of materials, both housing construction and financing were reduced to a very small volume. The entire number of permanent new houses built and financed over the period 1942–45 amounted to less than two-thirds of the number built and financed in the single year 1950.

An evaluation of the role of real estate credit regulation should not overlook the contribution it can make to the conservation of scarce materials in a period of intensified defense activity short of total war. The nature of the building industry makes it especially difficult to regulate through direct controls such as material allocation. To the extent, therefore, that demand for new construction, especially of one-family units, can be reasonably restrained by credit regulation, the problem of materials allocation is greatly simplified. This incidental advantage assumes greater importance during a period of expanding defense activity when the economy is still capable of providing a large over-all supply of consumer goods and the problem is one of limitation rather than drastic reduction.

Real estate credit regulation during the past year.—Regulation X of the Board of Governors was issued on October 12, 1950. It prescribed maximum loan values, maximum maturities, and minimum amortization terms for credit extended in connection with one- and two-family residential properties on which construction was started after August 3, 1950, the date specified in the Defense Production Act. The provisions of the Board's regulation were developed in cooperation with the Housing and Home Finance Administrator, who is responsible for the issuance of parallel regulations in connection with the Government-aided mortgage finance programs and, in accordance with the terms of Executive Order 10161, his concurrence was obtained prior to the issuance of all regulations respecting residential real estate credit.

After further study the regulation was broadened on January 12, 1951, to include all newly constructed residential property and on February 15, 1951, it was further extended to certain types of nonresidential structures, generally referred to as commercial properties. Different terms were prescribed in the supplement to the regulation for each of these major classifications. The credit terms in effect at the end of 1951 under Regulation X and associated regulations of the Federal Housing Administration and the Veterans Administration are shown in the attached Exhibit H, p. 429.

The restrictive effect of the credit regulations was not felt immediately. In order to avoid serious disruption of the building industry, financing arrangements made before the effective date of the regulation, including both commitments for conventional loans and applications for Federally insured or guaranteed mortgages, were exempted from the new terms. Exemption of these financing commitments, which operative builders regard as a normal part of their prudent advance planning, delayed the effect of the regulations. A substantial proportion of the new units started in the fourth quarter of 1950 and the first half of 1951 were under such arrangements. Moreover, construction involves a relatively long production period from the land planning stage to the time when a unit is turned over to its owner-occupant.

By the spring of 1951 inflationary pressures in construction and real estate markets, which had been strong during most of the postwar period, moderated somewhat. Activity continued at very high levels, but there was a greater degree of stability than had been apparent for some time. Construction costs, while at record levels, stabilized as material prices stopped rising, wage rates rose less rapidly than earlier, and delays attributable to shortages of materials became less frequent. This slackening of pressures in construction and real estate markets was an important factor in reducing inflationary tendencies in the economy as a whole during the middle of 1951. Mortgage debt, however, continued to be written at a very high rate, reflecting the large volume of extensions on existing properties not subject to regulation as well as the financing commitments for new construction made in the summer and autumn of 1950.

Because of Federal Reserve actions taken to raise reserve requirements of member banks and to reduce monetization of the public debt through withdrawal of rigid support of the Government securities market, mortgage lenders during the second and third quarters of 1951 were less willing than formerly to obtain funds for mortgage investment and business financing by selling Government securities in the market. Interest rates on nonmortgage securities rose somewhat more than on mortgages. The large volume of commitments made earlier to acquire mortgages absorbed such funds as were readily available from other sources. This situation produced a restraining influence on builders in this period which cannot be clearly differentiated from the effect of the selective measure.

In the first year following the imposition of Regulation X (roughly, the period November 1, 1950–October 31, 1951) the number of new housing units started was 1,123,400. This was a decline of about 19 percent from the corresponding period a year earlier. Beginning in February 1951, the number of starts each month has been lower than in the same month of 1950 and the number for the entire year 1951 was about one-fifth below 1950.

Compliance with Regulation X on the part of lenders has been facilitated by the cooperative assistance provided by the Comptroller of the Currency, Federal Deposit Insurance Corporation, Farm Credit Administration, Home Loan Bank Board, and the Federal Security Agency, each of which maintains an examining staff for the enforcement of Federal laws and regulations affecting lending institutions in its jurisdiction. Enforcement activities in respect to lenders supervised by the States have been arranged through the various State officials having responsibility for supervision of such corporations as noninsured banks, insurance companies, loan companies, and State-chartered building and loan associations. Lenders not regularly supervised by other Governmental agencies are examined for compliance with Regulation X by the Federal Reserve Banks. As of December 31, 1951, no violations of Regulation X had been disclosed which were of sufficient gravity to justify reference to the Department of Justice for action in accordance with Section 603 of the Defense Production Act.

Relaxation of real estate credit terms resulting from the Defense Housing and Community Facilities and Services Act of 1951 has recently increased demand for housing and for real estate credit. This has already added somewhat to inflationary pressures and may have an increasing effect as builders' plans, based on the new terms, materialize and as mortgage funds become more readily available. In this connection the impact of the liberal terms and increased availability of Federal funds for financing defense housing should be noted, since the arrangements necessary for this purpose emphasize the need for adequate restraint in other areas, both from an anti-inflationary point of view and from the standpoint of procurement of needed defense housing.

EXHIBIT H

Real estate credit terms under Regulation X and associated regulations of FHA and VA, December 31, 1951

[Regulation X terms as prescribed by the Board of Governors of the Federal Reserve System with the concurrence of the Housing and Home Finance Administrator and terms on loans insured or guaranteed by the Federal Housing Administration and the Veterans' Administration as issued under the authority of the Housing and Home Finance Administrator under the provisions of the Defense Production Act of 1950, as amended, and Executive Order 10161]

Value per family unit	1- to 4-family units and farm residences: Regulation X and FHA	1- to 4-family units and farm residences: VA	Multi-unit residences (regulation X and FHA	Nonresidential properties[1] (Regulation X)
	Maximum loan per family unit[2] (in percent of value unless otherwise specified)			Maximum loan per property
Not more than $7,000	90	96 percent of price	83	
$7,001–$10,000	85	94 percent of price	$5,810 plus 53 percent of excess over $7,000 (83–67).	
$10,001–$12,000	80	92 percent of price		
$12,001–$15,000	$9,600 plus 40 percent of excess over $12,000 (80–72).	$11,040 plus 17 percent of price over $12,000 (92–77 percent of price).		
$15,001–$20,000	$10,800 plus 20 percent of excess over $15,000 (72–59).	$11,550 plus 25 percent of price over $15,000 (77–64 percent of price).	$10,050 plus 20 percent of excess over $15,000 (67–50).	50 percent of value.
$20,001–$23,500	$11,800 plus 10 percent of excess over $20,000 (59–50).	$12,800 plus 15 percent of price over $20,000 (64–55 percent of price).		
$23,501–$24,500			50	
Over $24,500	50	55 percent of price		
	Maximum maturity (years)			
Not more than $12,000	25	25[3]	None specified	25.
Over $12,000	20	20[3]		
	Amortization requirements			
All values	Minimum annual reduction of 5 percent of original loan until amount outstanding is 50 percent or less of property value at time the loan was made or liquidation of loan by maturity through substantially equal periodic payments or payments of principal.		None specified under Regulation X; periodic payments satisfactory to Commissioner on FHA loans.	Liquidation of loan by maturity through substantially equal periodic payments or payments of principal.
Effective date	Sept. 1, 1951[4]	Sept. 1, 1951[4]	Jan. 12, 1951	Feb. 15, 1951

[1] Properties generally described as commercial and recreational.

[2] Maximum amount of loan insured by FHA may not exceed $14,000 on 1-family, $16,000 on 2-family, $20,500 on 3-family, $25,000 on 4-family residences, or $8,100 per unit on multi-unit projects. On existing 1- to 4-family units the loan amount may not exceed 80 percent of value.

[3] Under special circumstances and with the approval of the Veterans' Administrator, the maximum maturity on a loan may be 30 years.

[4] For terms effective before Sept. 1, 1951, see Federal Reserve Bulletin for October 1950, p. 1321, and January 1951, pp. 31–32.

NOTE.—These regulations limit the amount of credit that may be extended in connection with certain types of real estate. Real estate credit terms on dwelling units programmed by the Housing and Home Finance Administrator in critical defense housing areas have been suspended or relaxed as provided by the Defense Housing and Community Facilities and Services Act of 1951 and as prescribed by the Administrator.

12. Explain and evaluate the Voluntary Credit Restraint Program which has been developed during the past year. What are the precautions taken to insure fair treatment to competing firms? What do you consider to be the role of voluntary credit restraint under each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33?

(Assumptions in Question F-33 are as follows: restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future, (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future, (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and (*d*) under conditions of total war.)

The Voluntary Credit Restraint Program had its genesis in the post-Korean inflationary boom in the second half of 1950. Rapid expansion in the major types of private credit during that period made it necessary to use all practical devices for curtailing the use of private credit for nonessential and speculative purposes in order thus to help limit the growth of inflationary pressures.

The Program was designed to provide means whereby lending institutions themselves could participate directly, on their own initiative and in an organized way, in the fight against inflation. Thus the Program was conceived as an adjunct to available general and selective credit measures. It was recognized that it was very difficult to appraise the aggregate credit needs of the economy, or to say whether the granting of a particular loan would have undesirable inflationary repercussions. But it was believed that by screening requests for financing on the basis of broad criteria for essential and nonessential uses, lending institutions could help to restrain credit expansion and assure that available funds would be employed for essential purposes.

The basic objective of the Voluntary Credit Restraint Program as set forth in the Statement of Principles is as follows:

> It shall be the purpose of financing institutions to extend credit in such a way as to help maintain and increase the strength of the domestic economy through the restraint of inflationary tendencies and at the same time to help finance the defense program and the essential needs of agriculture, industry and commerce * * *. Under present conditions of very high employment of labor, materials and equipment, the extension of loans to finance increased output will have an initial inflationary effect; but loans which ultimately result in a commensurate increase in production of an essential nature are not inflationary in the long run whatever their temporary effect may be. It is most important, however, that loans for nonessential purposes be curtailed in order to release some of the nation's resources for expansion in more vital areas of production.

Background and general features

Section 708 of the Defense Production Act of 1950 authorized the President to encourage financing institutions to enter into voluntary agreements and programs to restrain credit that would further the objectives of that Act. By Executive order, the President delegated to the Board of Governors of the Federal Reserve System his authority with respect to financing under this section of the Act, with the condition that the Board consult with the Attorney General and with the Chairman of the Federal Trade Commission and that the Board obtain the approval of the Attorney General before requesting actions under such voluntary agreements and programs.

In the latter part of 1950, upon invitation of the Board of Governors, representatives of the American Bankers Association, the Life Insurance Association of America, and the Investment Bankers Association of America began a series of conferences for the purpose of devising a satisfactory plan of operation. Out of these discussions emerged the Program for Voluntary Credit Restraint (Exhibit I, p. 450). This program was approved by the Board of Governors of the Federal Reserve System, and the Board's request to financing institutions to act in accordance with the Program was approved by the Attorney General.

The Program, conceived to encompass all financing institutions in the United States, was announced on March 9, 1951, in a letter from the Chairman of the Board, addressed to such institutions, requesting them to act in accordance with the provisions of the Program for Voluntary Credit Restraint. This letter was directed to organizations of any kind engaged in the business of extending credit; making loans; or purchasing, discounting, selling, distributing, dealing in, or underwriting securities.

The original conference group which planned the Program included representatives of commercial banks, life insurance companies, and investment bankers. These groups were represented on the National Voluntary Credit Restraint Committee as originally constituted. Later, representatives of mutual savings banks and savings and loan associations were added to the National and regional committees. Fraternal insurance companies were subsequently granted representation on the regional committees. In addition, representatives of other types of lending institutions, e. g., finance companies, commercial receivables companies, and mortgage bankers, have discussed the Program and their cooperation therein with members of the National Committee.

It should be emphasized that the Program is in every sense of the term a voluntary undertaking on the part of the financing institutions. Pursuant to the requirements of the Program, a member of the Board of Governors of the Federal Reserve System is Chairman of the National Committee, and personnel from the various Federal Reserve Banks are members of most of the regional committees. The Federal Reserve System, however, does not impress its views upon the National or regional committees as to the types of loans that are appropriate or inappropriate under the circumstances, and undertakes no action to oblige lending institutions to participate in the Program.

The various committees established under the Program, moreover, have no authority to control or direct the policies of the cooperating lending institutions. A lender may disregard the Program, if he so desires. The plan is based on the premise that a substantial degree of cooperation can be obtained on a voluntary basis provided that: (*a*) the lending standards which lenders are asked to follow are realistic and appropriate to the economic environment; (*b*) such standards are nondiscriminatory as between borrowers of the same general class; and (*c*) participating financial institutions are fully informed as to the desirable lending standards.

The plan provides that a lending institution that is uncertain as to whether a particular application for credit conforms to the established standards can obtain the judgment of a committee composed of men drawn from similar types of institutions in his region. A lending institution, however, is under no compulsion to seek the advice of such a committee, nor is it required to follow the advice or judgment of the group.

Committee organization and functions

The central coordinating organization in the Program is the National Voluntary Credit Restraint Committee, the members of which are appointed by the Board of Governors of the Federal Reserve System. The Committee comprises four representatives each of commercial banks, life insurance companies, and investment bankers, and two representatives each of mutual savings banks and savings and loan associations. Membership of the Committee was selected so as to achieve representation from various geographic areas and from small, medium, and large financing institutions. Additional members and alternates may be designated by the Board of Governors of the Federal Reserve System. Governor Oliver S. Powell of the Board of Governors has been Chairman of the National Committee from the Program's inception, and the Alternate Chairman is George B. Vest, General Counsel of the Board. The National Committee has avoided building up a large organization. It has no budget and relies almost entirely upon part-time assistance of regular staff members of the Board of Governors.

One of the main functions of the National Committee is to develop appropriate recommendations applying the Statement of Principles to special lending areas, and to make these available for the guidance of regional committees and participating financial institutions. General guideposts to lending policy were included in the original Statement of Principles of the Program; these have been interpreted and developed in somewhat greater detail in a series of bulletins. In addition, the Committee has discussed particular problems that have arisen in the course of the Program and has authorized the distribution to the regional committees of memoranda outlining its views on these topics as additional informal guides to lending policy. In all these efforts the objective has been to describe the types of credits which, in the Committee's opinion, should or should not be regarded as proper under the Program.

The National Committee also appoints the regional committees and designates the chairman in each case. Evaluation of the course of the Program and preparation of occasional reports on progress are also its responsibility. In this connection the Committee has urged and cooperated in the development of several statistical reports to fill in major gaps in the available data on lending operations of commercial banks and life insurance companies. The Committee is also charged with responsibility for advising the Board of Governors on the functioning of the Program and for recommending to the Board any changes which it deems desirable in the Program including the Statement of Principles.

The regional committees occupy a key position in the Program since they are the point of liaison between the National Committee and the lending institutions cooperating in the Program. As in the case of the National Committee, the membership of the regional committees has been drawn from divergent geographic areas and from small, medium, and large institutions. The number of such committees has been gradually increased as the need became evident and at the end of 1951 there were 43 committees divided as follows: 19 representing commercial banks; 4, life insurance companies; 4, investment banking; 4, mutual savings banks; and 12, savings and loan associations. A Federal Reserve Bank officer is a member of each committee which has headquarters in a city in which there is a Federal Reserve Bank or branch.

The most important single function of the regional committees is to consider inquiries from financial institutions as to whether a particular application for credit is in accord with the standards or guides to lending policy set forth in the Statement of Principles, bulletins, or memoranda of the National Committee. In consulting with a regional committee, a financing institution is not required to disclose the identity of the applicant for any loan. Regional committees maintain records of their actions and make reports to the National Committee showing the types of cases considered and the nature of the advice given in each instance. This information is collated by the National Committee and digests of representative cases and opinions have been distributed to the various regional committees for their information.

General lending standards

The Voluntary Credit Restraint Program marks a new development in the evolution of American lending standards. In effect, the Program urges financing institutions to screen loan applications on the basis of purpose (i. e. the use to which the proceeds will be put) in addition to applying the customary and well established tests of creditworthiness. For some lenders this is a striking departure from customary practice under which no information was obtained as to the use of loan proceeds. Other lenders who have been obtaining such information have used it heretofore as a factor in their appraisal of credit risk and not as a separate and special criterion in passing on a loan application.

The lending institution which is cooperating in the Program must not only assure itself that the borrower will be able to repay the loan, but must also be satisfied that the loan is for a purpose that is appropriate under conditions of underlying inflationary pressures and is consistent with the basic objectives of the Voluntary Credit Restraint Program. One of the most perplexing problems in the development of the Program to date has been that of trying to establish some useful and workable standards and benchmarks for differentiating between those purposes which are consistent with the Program and those which are not. Loans to finance defense production have posed no problem; these credit needs have to be met even at the expense of some addition to inflationary pressures. In spite of the growing defense program, however, some 87 percent of the gross national product is still represented by civilian goods, and this requires substantial amounts of financing. In this civilian area, the National Committee has encountered the difficult task of trying to devise some standards for differentiating between essential production, which should continue to receive financing, and nonessential activities, which could appropriately be delayed.

In coping with this problem of lending standards, the National Committee recognized that comprehensive and precise rules and regulations would not be consistent with the essentially voluntary character of the Program, and might well discourage many institutions from even attempting to participate. Consequently, it was deemed more appropriate to phrase the standards for extending credits in fairly broad terms, rather than to list a host of detailed and specific criteria for lending practice, and to rely upon the willingness of lending institutions to conform to the spirit of the Program rather than to comply with numerous legalistic rules. Hence the lending standards set forth in the original Statement of Principles and in the bulletins and memoranda of the National Committee are couched in fairly broad and general language.

The Statement of Principles was the initial effort to express appropriate lending standards. The purpose of financing institutions in extending credit during the defense emergency was described as that of assisting in financing the defense program and meeting the essential needs of agriculture, commerce, and industry and at the same time curtailing loans for nonessential purposes. The basic criterion for sound lending in a period of inflationary danger was summarized as follows: "Does it commensurately increase or maintain production, processing and distribution of essential goods, and services?" The following types of loans were described as proper:

1. Loans for defense production, direct or indirect, including fuel, power, and transportation.
2. Loans for the production, processing, and orderly distribution of agricultural and other staple products, and of goods and services supplying the essential day-to-day needs of the country.
3. Loans to augment working capital where higher wages and prices of materials make such loans necessary to sustain essential production, processing, or distribution services.
4. Loans to securities dealers in the normal conduct of their business or to them or others incidental to the flotation and distribution of securities where the money is being raised for any of the foregoing purposes.
5. Loans guaranteed or insured or authorized as to purpose by a Government agency. (The theory here was that such loans should be restricted, in accordance with national policy, at the source of guarantee or authorization.)
6. Loans arising out of commitments previously entered into.

The following were cited as types of loans which, in general, financing institutions should not make under present conditions, unless modified by the circumstances of the particular loan so as not to be inconsistent with the Principles of the Program:

1. Loans to retire or acquire corporate equities in the hands of the public.
2. Loans for the acquisition of existing companies or plants where no over-all increase of production would result.
3. Loans for speculative investments or purchases, including speculative expansion of real estate holdings or plant facilities as well as speculative accumulation of inventories in expectation of resale instead of use.

Financing areas made the subject of special bulletins

Since March, as credit problems have developed in special areas, the National Committee has issued bulletins elaborating the Statement of Principles for these areas. The Committee held its initial meeting in mid-March 1951, at a time when business inventories were increasing at record rates. It was the feeling of the Committee that an important part of the inventory additions was being financed by borrowed money. Consequently, Bulletin No. 1 of the Committee dealt with inventory loans and requested financing institutions to—

1. Refrain from financing inventory increases above normal levels relative to sales, or reasonable requirements by other conservative yardsticks.
2. Encourage borrowers who already have excess inventories to bring these commitments and inventory positions in line as promptly as is reasonably practical, thereby reducing the amount of credit being used in this manner.

At its meeting on April 18, 1951, the National Committee discussed the financing of business capital expenditures. The Committee commented on the record levels of spending on plant and equipment and expressed its view that a substantial portion of these programs was deferrable. The following were cited in Bulletin No. 2 as some of the nonessential uses of long-term financing that might be postponed to a more propitious time:

1. Construction of facilities to improve the competitive position of an individual producer of nonessential goods.
2. Expansion and modernization expenditures of concerns in distribution or service lines where the distribution or service is not defense supporting.
3. Expansion and modernization programs for the manufacture of consumer goods not related to the defense effort.

This bulletin was reissued on December 21, 1951, in a somewhat expanded form, but without substantial change.

On May 3, 1951, the National Committee considered borrowing by State and local governments and issued Bulletin No. 3, which presented the Committee's conclusion in this field of long-term credit as follows:

1. Plans for expansion of public facilities, which on the basis of original plans are turning out to be underfinanced at present prices, should be examined with a view to eliminating nonessential features and thus avoiding more borrowing.

2. Soldiers' bonus issues were described as inflationary under the conditions then prevailing. The Committee expressed the view that it seemed desirable to postpone such issues until a time when immediate purchasing power is needed to counteract unemployment and when it might be more beneficial to the veteran.

3. Financing of the following types of outlays should be postponed:

(*a*) Replacement of existing facilities that can continue to perform their functions during the emergency period.

(*b*) Construction of facilities of the type not recommended by the Defense Production Administration—such as recreational facilities and war memorials.

(*c*) Acquisition of sites or rights-of-way not immediately needed.

(*d*) Purchase of privately owned utilities by municipalities, which involves borrowing to replace equity capital.

The Committee also urged lenders to encourage local governments to balance their operating budgets, and to hold to a minimum borrowing in anticipation of revenues. Financing institutions were also urged to screen all proposed purchases or sales of securities of State and local governments in accordance with the Program. On the day this Bulletin was released (May 7, 1951), a letter was addressed by the Director of Defense Mobilization, Charles E. Wilson, to State and local governments in which he requested that their borrowings be postponed no matter how worthy the project, if the project was postponable. The Director's letter mentioned soldiers' bonus payments, war memorials, and municipal recreational projects as falling within the postponable category. His letter also requested that every State and municipal borrowing of 1 million dollars or over receive the approval of one of the regional committees in the Voluntary Credit Restraint Program before being consummated either by a single lender or by public sale. The National Committee in its Bulletin referred to the Defense Mobilization Director's letter and requested that financing institutions cooperate by not participating in the sale or purchase of such securities unless the issue had been cleared by a regional committee.

The application of the principles of the Program for Voluntary Credit Restraint to loans on real estate was considered at the meeting of the National Committee on June 6, when Bulletin No. 4 dealing with real estate financing was issued, and again on September 5, 1951. At the latter meeting it developed that the provisions of the Bulletin were not being complied with in certain areas, that cooperating lenders were under substantial pressure from lenders operating outside the Program, and that some relaxation of the provisions governing the financing of 1- to 4-family unit residential properties was necessary in order to prevent a spreading disregard of the Program's lending standards in these areas. The views of the National Committee on real estate financing may be summarized as follows:

1. The function of the Program is not to make the transfer of real estate impossible or impracticable, but rather to reduce inflationary pressures by limiting the amount of additional credit created in the process of real estate transfer.

2. The Program does not apply to real estate credit transactions governed by Regulation X which covers the permanent financing of most new construction and major additions or improvements to existing structures. Nor does the Program apply to FHA or VA loans or to other loans guaranteed or insured or authorized as to purpose by an agency of the United States since these are covered by Government agency regulations. The Program does apply, however, to all other real estate credit transactions.

3. In determining whether proposed financing conforms to the Bulletin, all mortgage indebtedness to be outstanding on the property, including secondary financing, should be taken into account.

4. Loans on existing residential property (1- to 4-family units) should not be made in an amount which would cause the total amount of credit outstanding to exceed the limit which Regulation X imposes as to new construction or a limit of 66⅔ percent of the fair value of the property, whichever is greater. As a working rule this means that where the fair value is $16,700, or less, the limits of Regulation

X (all of which are above 66⅔ percent in this range) would apply and where such fair value is more than $16,700 the limit of 66⅔ percent would apply.

5. Loans on residential property (more than 4-family units) and on commercial property should be screened as to purpose and should not be made unless they are in harmony with the Program. If the loan is to be made in connection with a sale, a determination that the sale and the sale price are bona fide may constitute sufficient screening of the loan. Financing institutions are urged to limit loans so that the total credit outstanding will not exceed 66⅔ percent of the fair value of the property.

6. Loans on agricultural property should be screened as to purpose in the same manner as described above for loans on commercial property.

7. Loans on industrial property should be screened as to purpose whether or not the loan is to be made in connection with a sale of real property. In this instance, however, there appears to be no need for a percentage limitation on the amount of the loan, since in the industrial field mortgage security usually is merely one of the factors considered by the lender in determining whether to make the loan and often bears comparatively little relation to the amount of the loan. Effective December 31, 1951, Bulletin No. 4 was amended to provide for the screening of certain leasing arrangements involving new construction of commercial or industrial property, since the Board of Governors at the same time exempted such arrangements from the provisions of Regulation X.

On July 23, 1951, the National Committee in Bulletin No. 5 expressed the view that loans in the American markets by foreign borrowers should be screened to the same extent and with the same purpose tests as comparable American credits.

On July 24, 1951, in order to clear up some ambiguity as to the status of loans secured by listed securities (subject to Regulations U or T of the Board of Governors) and loans secured by unlisted securities, the National Committee issued Bulletin No. 6 in which it took the following position:

1. Loans on securities covered by Regulations U or T are basically for the purpose of purchasing or carrying listed securities and are not subject to the Program. The Committee recommends, therefore, that all loans on securities for purchasing or carrying unlisted securities be presumed to be for a proper purpose if the amount of the credit extended is no greater than that permitted in the case of listed securities by Regulations U or T.

2. Loans on securities, whether or not listed, not for the purpose of purchasing or carrying securities should be made only for purposes consistent with the Program.

The foregoing summarizes the published statements of the National Committee as to appropriateness under the Program of particular classes or types of loans. Problems of less general interest have been covered through informal memoranda. For example, in the question of loans to finance companies the National Committee expressed its view that these loans should be screened in the light of the adopted lending principles, and should be made only if the proceeds were to be used to finance an increase in lending which is compatible with the Program or if subject to the provisions of the Board's Regulation W. In September the regional committees and participating lending institutions were advised that loans required for the rehabilitation of disaster areas were regarded as being in accord with the Program. This statement had particular reference to rehabilitation required by floods in the Middle West, but covers other disasters should they arise.

Evaluation of the program

The Voluntary Credit Restraint Program made an important contribution to the easing of inflationary pressures and to the slowing down in the rate of credit expansion after early 1951. It should be emphasized that the effectiveness of the Program was substantially increased as the result of the accord reached with the Treasury in March 1951, under which the Federal Reserve System terminated the policy of purchasing Government securities at largely predetermined and inflexible prices, a policy which had provided large amounts of bank reserves during the postwar period. By virtue of this accord it was possible to permit market forces to have greater influence in the Government security market and, by allowing relatively small declines in the prices of Government bonds, to achieve by mid-1951 a situation in which the Government bond market was free of support by the Federal Reserve System.

This action contributed to a less aggressive lending policy on the part of many financial institutions and helped to create an environment which was generally favorable to attaining the objectives of the Voluntary Credit Restraint Program. In turn, the Program called the attention of lenders to the desirability of channeling scarce credit resources into defense and essential civilian activities and thus assisted and supported the general credit and monetary policies of the System. Both the Program and the restrictive general credit policies helped to change the climate of business expectations and contributed to growing skepticism earlier in 1951 as to the indefinite continuation of the post-Korean inflationary spiral. This change in business thinking is discussed in the answer to Question F–32.

In addition to its initial impact in contributing to the change in the inflationary outlook early in 1951, the Program had cumulative effects upon lending policies as its organization was developed and its operations extended. Thus, it has gradually influenced various areas of lending activity. Its major contribution has been in types of lending which are not well suited to the use of selective credit regulation. As pointed out in the answer to Question F–38, there are large areas of financing in which selective credit regulation is neither feasible nor practicable. These areas include, for example, short- and long-term financing by business concerns for which the multi-purpose uses of loan proceeds, as well as the varied terms and conditions under which such funds are obtained, would pose difficult problems of administrative definition and compliance. In such areas, the Program has been a most useful restraining influence.

Several types of evidence show that the Program has had a restraining effect on the lending policies of the participating institutions. The opinions rendered by the regional committees, for example, show how lenders have been applying the standards of the Program in their evaluation of applications for credit. A digest of such opinions, showing examples of financing approved and disapproved by the regional committees is included in Exhibit J, p. 455. A review of the opinions of the regional committees indicates a surprising degree of uniformity in the interpretation and application of the lending standards of the Program.

Insight into the operation of the Program in the commercial banking field was obtained by the American Bankers Association in a survey of the opinion of bankers made in October 1951. A summary of the replies, prepared by the staff of the American Bankers Association, is included in Exhibit K, p. 459. This report concludes that "the Voluntary Credit Restraint Program has had a very salutary effect upon the lending activities of the banks." The survey showed that the principal types of loans rejected or discouraged included loans for speculative and undue inventory accumulation, loans for real estate purchases and speculation in residential building, loans to corporations for the purchase or retirement of their own stock, and loans for the purchase of existing businesses. Competition of banks with other private or with Government lending institutions has not impaired the effectiveness of the Program as a whole, in the opinion of these bankers, although individual instances of such competition have been commented upon critically. Almost all of the suggestions for the improvement of the Program were concerned with its public relations aspects and apparently reflected the belief that "because the program of credit restraint is voluntary, it is essential that bankers and businessmen should be well informed regarding its principles and purposes."

The credit policies of the Federal Reserve System and the Voluntary Credit Restraint Program, together with the change in the economic environment to which these credit measures contributed, are reflected in developments in the credit field during recent months. A larger proportion of the available private credit is being channeled into defense and essential civilian activities and, in several categories, the volume of outstanding credit has been increasing less rapidly recently than in the immediate post-Korea months. Quarterly increases in selected types of credit during 1950 and 1951 are shown on Table VIII.

TABLE VIII.—*Increases in selected types of credit*

[In billions of dollars]

Period	Consumer credit		Real estate mortgage loans	Business loans of commercial banks	Security issues	
	Total	Installment credit			Corporate new capital	State and local government
1950—First quarter	−0.5	0.2	1.9	0.0	1.1	1.2
Second quarter	1.3	1.0	2.8	−0.1	1.6	0.9
Third quarter	1.7	1.2	3.1	2.5	0.9	0.8
Fourth quarter	0.8	0.1	3.1	2.5	1.3	0.7
1951—First quarter	−0.7	−0.5	2.5	1.9	1.6	0.6
Second quarter	−0.1	0.0	3.0	−0.1	2.2	1.0
Third quarter	0.1	0.2	2.3	1.1	1.4	0.8
Fourth quarter [1]	1.0	0.1	1.7	1.8	2.2	0.9

[1] Partly estimated by Federal Reserve Board.

NOTE.—Data on consumer and real estate mortgage credit and commercial bank business loans represent net changes in outstanding amounts; those on corporate new capital and State and local government security issues are gross amounts of new issues with no account taken of retirements or redemptions. Minus sign indicates decline.

Source: Federal Reserve Board, Home Loan Bank Board, Department of Commerce, Securities and Exchange Commission, and *Bond Buyer*.

Bank loans.—Through the efforts of the National Voluntary Credit Restraint Committee, and with the assistance and cooperation of the Federal Reserve System and the commercial banks, a notable advance has been achieved in the information regarding changes in business loans. Member banks holding about 75 percent of the total commercial, industrial, and agricultural loans of all commercial banks are now reporting weekly on the changes in their principal classes of commercial and industrial loans. These up-to-date reports show changes in the use of bank credit by major types of industries and also show changes in loans classified by purpose, i. e. for defense, defense-supporting, and other activities. For the first time it is now possible to obtain a continuing record of what is happening in the all-important category of business loans about which so little has been known heretofore. The changes in "business loans" of commercial banks in 1951 after the initiation of the new series are shown by industry in Chart 13 and by purpose in Chart 14. With regard to the second chart, it should be noted that loans for activities other than defense and defense-supporting include many purposes which would be regarded as essential in an economy that is still so largely civilian in character.

Changes in these loans by industry in the period from July to October 1951 are compared in Table IX with developments in the comparable period of 1950, the data for this period being based upon a special survey. The increase in business loans was significantly smaller in 1951 than it was in 1950, in spite of the fact that field reports indicate that the demand for bank credit continued at very high levels in 1951.

TABLE IX.—*Changes in commercial, industrial, and agricultural loans, by industry, midyear through October*

[In millions of dollars]

Business of borrower	1951	1950
Manufacturing and mining:		
Food, liquor, and tobacco	+521	+413
Textiles, apparel, and leather	−217	+130
Metals and metal products	+537	−17
Petroleum, coal, chemicals, and rubber	+68	+19
Other manufacturing and mining	+75	+17
Trade—wholesale and retail	+40	+272
Commodity dealers	+394	+690
Sales finance companies	−104	+324
Public utilities and transportation	+318	+50
Construction	−61	+55
All other types of business	−6	+113
Loans classified as to business	+1, 565	+2, 065
Loans not so classified	−214	+809
Total	+1, 351	+2, 874

NOTE.—Federal Reserve data. Figures for 1951 were collected at the request of the National Voluntary Credit Restraint Committee from about 220 weekly reporting member banks. Data for 1950 are from a special survey of selected member banks in leading cities. Although the coverage is less complete for 1950 than for 1951, all of the large banks that cooperated in the 1950 survey are included in 1951.

Public utilities (including transportation) and manufacturers of metals and metal products, both of which are closely related to the defense effort, have been the most consistent users of bank credit and showed large increases in their borrowings in 1951 in comparison with 1950. Until the end of July 1951 commodity dealers and manufacturers of food, liquor, and tobacco made substantial reductions in their bank loans; beginning in August, however, the harvest-

CHART 13

WEEKLY CHANGES IN BUSINESS LOANS OF COMMERCIAL BANKS, APRIL - DECEMBER 1951

BY INDUSTRY

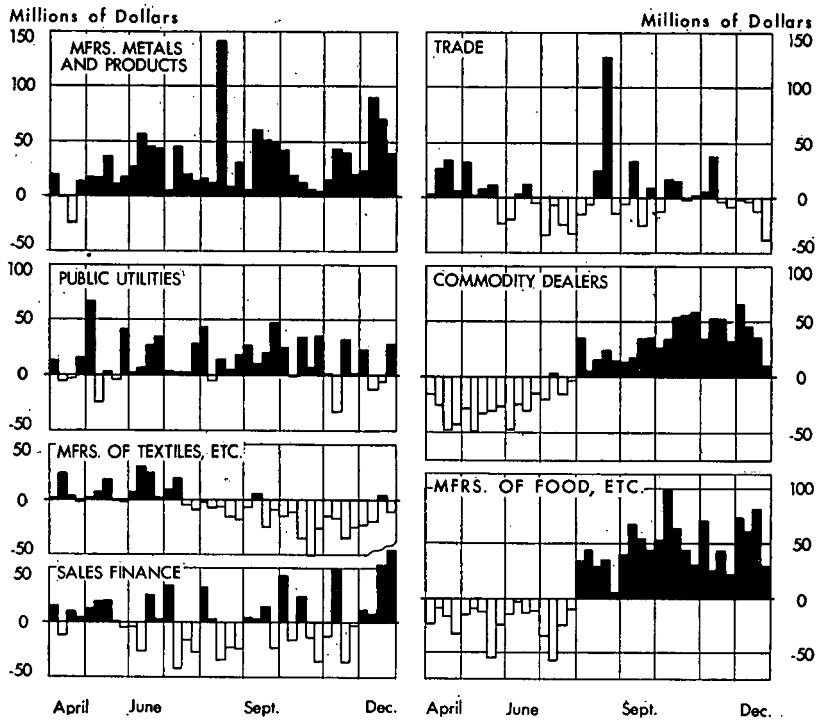
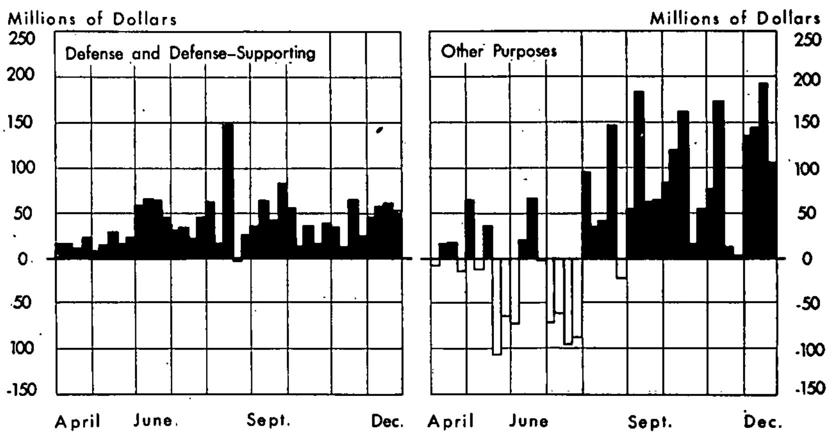


CHART 14

WEEKLY CHANGES IN BUSINESS LOANS OF COMMERCIAL BANKS, APRIL - DECEMBER 1951

BY DEFENSE AND OTHER PURPOSES



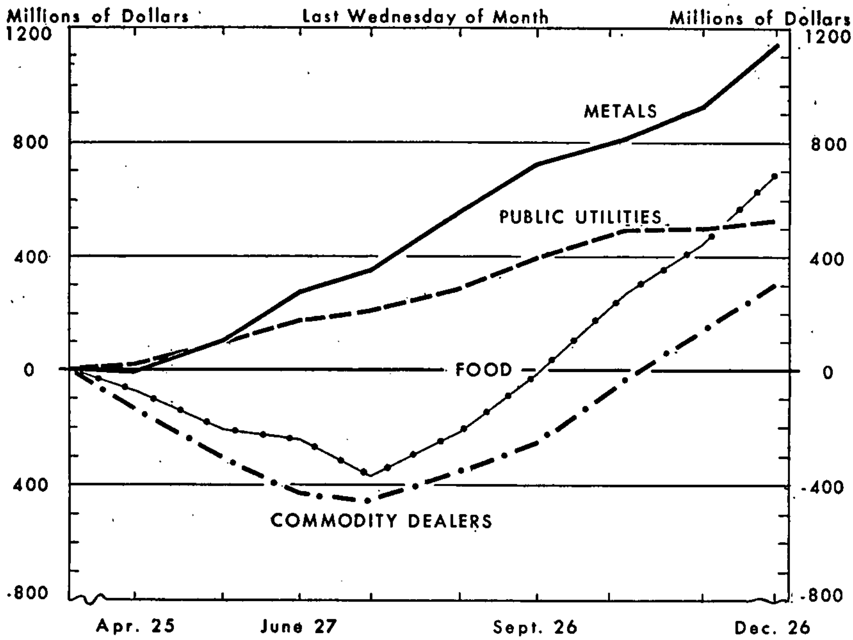
ing of the crops has been reflected in a seasonal increase in loans to these borrowers. Manufacturers of textiles, apparel, and leather goods increased their use of bank credit until the middle of July but have been repaying loans in recent months; their borrowings have evidenced sizable declines since mid-1951 in comparison with increases in the corresponding period in 1950. Loans to sales finance companies were relatively stable in the summer and fall of 1951, whereas they increased significantly in the comparable period of 1950.

In recent months, therefore, the use of bank credit has been largely confined to defense and defense-supporting activities and to the marketing of agricultural commodities. This conclusion is reaffirmed by Chart 15, which shows changes since March in loans to selected major industries.

CHART 15

CHANGES IN BUSINESS LOANS OF COMMERCIAL BANKS TO SELECTED INDUSTRIES

CUMULATIVE SINCE MARCH 28, 1951



Lending by life insurance companies.—Another area in which available information has been augmented as the result of the efforts of the National Voluntary Credit Restraint Committee is lending by life insurance companies. The Life Insurance Association of America has undertaken the collection from a representative group of companies of data on acquisitions of loans and investments and on outstanding commitments to acquire such loans and investments. Starting with outstanding commitments as of the end of April 1951, acquisitions beginning in May 1951, and new commitments beginning in September 1951, figures have been supplied on a continuing basis by 45 companies whose combined assets represent 85 percent of the total assets of all life insurance companies in the United States. As in the case of the reports on bank loans, the reports of the life insurance companies show a breakdown of acquisitions and commitments by broad industrial classifications of the borrower and also according to the defense or nondefense purpose of the loan.

Due in part to the erratic timing of borrowing by individual business concerns and of security flotations, and in part to differing seasonal requirements for funds among various industries, it is difficult to determine the extent and significance of financing trends among the various industries and purposes on the basis of the acquisition reports of the life insurance companies. No particular trends are apparent in the volume of acquisitions, the dollar volume fluctuating markedly from period to period. For the interval for which reports are available, however, somewhat less than one-half of the loans and investments acquired represented defense or defense-supporting uses of credit.

It should be borne in mind that many of the loans and investments acquired in recent months represent take-downs of previously outstanding commitments, the great majority of which antedated the Voluntary Credit Restraint Program, some by as much as 12 to 18 months. As these previous commitments are worked off, life insurance companies will be more free to shift their new loans and investments to those purposes considered to be defense or defense-supporting.

The data in Table X show that life insurance companies gradually worked down the volume of their outstanding commitments between the end of April and the end of August 1951. The apparent increase in outstanding commitments during September is accounted for primarily by broadening of the coverage of commitments statistics to include business mortgage loans of less than $100,000 and foreign investments, neither of which was included in the April-August figures. During October and November there was some increase in outstanding commitments, primarily to business concerns engaged in defense or defense-supporting activities. Despite the increases resulting from broader coverage, as well as new commitments entered into during October and November, the total outstanding on November 30 was below that of April 30. Moreover, over the period from April to November, as may be determined from Table X, the volume of outstanding commitments to acquire residential real estate mortgages declined by nearly one-third, while declines in commitments to State and local governments and to business concerns engaged in nondefense activities more than offset an increase in commitments to business concerns engaged in defense and defense-supporting activities.

TABLE X.—*Outstanding commitments of 45 life insurance companies to acquire loans and investments, April–November 1951* [1]

[In millions of dollars]

Borrower	Apr. 30	May 31	June 30	July 31	Aug. 31	Sept. 30	Oct. 31	Nov. 30
Total commitments	4,504.0	4,331.3	4,197.3	4,055.1	3,748.6	3,927.5	4,036.8	4,393.7
Defense, total	1,686.9	1,676.5	1,760.1	1,757.3	1,641.7	1,705.5	1,867.1	2,111.9
Public utilities	382.9	450.0	446.3	449.7	408.9	407.1	395.4	353.1
Railroads	299.5	298.3	308.5	297.0	285.7	235.7	203.5	191.8
Business and industrial concerns	1,004.5	928.3	1,005.4	1,010.6	947.1	1,062.7	1,268.2	1,567.0
Nondefense, total	2,709.3	2,564.2	2,361.6	2,220.9	2,052.6	2,163.0	2,119.0	2,238.0
Business and industrial concerns	962.6	937.1	831.4	751.7	743.5	917.8	944.8	955.1
Farm purchasers	98.5	88.4	83.1	79.5	80.4	83.3	96.2	97.5
Nonfarm home purchasers	1,648.2	1,538.8	1,447.0	1,389.6	1,228.6	1,061.0	1,078.0	1,185.5
State, provincial, and local governments	107.8	90.6	75.6	76.9	54.3	59.0	50.7	43.8

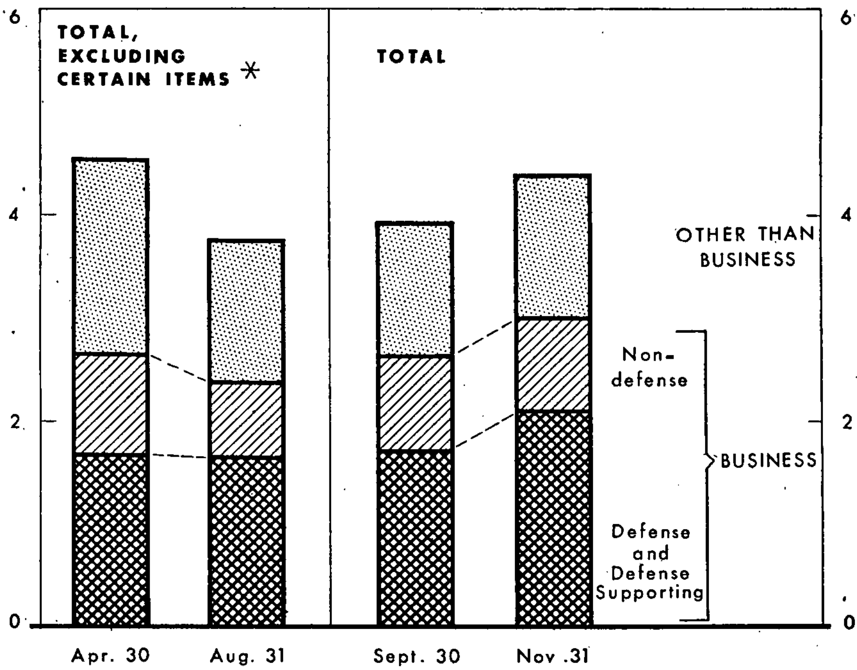
[1] Includes, beginning September, business mortgage loans of less than $100,000 and foreign investments, neither of which was reported prior to that month.

NOTE.—The 45 life companies account for85 percent of the assets of all United States life companies. Data compiled by the Life Insurance Association of America in accordance with the Program for Voluntary Credit Restraint.

The decline since April in outstanding commitments in nondefense categories is also shown in Chart 16. These statistics confirm the

CHART 16

LIFE INSURANCE COMPANY COMMITMENTS, 1951



* Excludes business mortgage loans of less than $100,000 and foreign investments.

view that the life insurance companies, in accordance with the objectives of the Program, are channeling a larger share of their new commitments into purposes related to the defense effort.

New security issues.—The National Committee is naturally interested in following the volume of new security issues. Data on corporate new capital issues, classified by major industry, purpose, and form of sale, on a basis comparable with other recent postwar periods, afford some indication of the aggregate level of new financing. Data on large individual issues (5 million dollars and over) reveal some decline in recent months in issues which, on their face, would appear to be for nonessential purposes.

In the case of State and local government long-term financing, data showing a breakdown of security issues by issuing authority and by purpose indicate that the bulk of such financing in 1951 has been for such essential purposes as the construction of schools, hospitals, sewage and water works, and other facilities required for the public welfare. Only one bonus issue has been underwritten by investment bankers this year, and that was prior to the inception of the Voluntary Credit Restraint Program. In numerous cases proposed State and local government issues have been deferred as the result of the Program; in still other instances, the regional committees have been able to achieve reductions in the size of proposed issues before granting their approval. These results reflect the fine spirit of cooperation on the part of numerous officials in State, city, and other local government jurisdictions in keeping down the volume of issues that do not conform with the lending principles of the Program. Their efforts have made the Program successful in an area where expansionary trends are very strong.

While it is impossible to measure in exact statistical terms the contribution of the Program toward the slower rate of private credit expansion and the relatively greater use of credit for defense and essential civilian purposes evidenced in recent months, it seems apparent that the Program has contributed significantly to these developments.

Other results of the Program.—A valuable by-product of the Voluntary Credit Restraint Program is that it has given lending officers new benchmarks for their appraisal of loan applications. It has broadened their horizon beyond the fairly limited objective of appraising the creditworthiness of a prospective borrower. The Program has made them increasingly aware of the importance of credit policy in an economic stabilization program, and it has contributed to prudence in lending. Equally important, these results have been achieved without shutting off the supply of credit to borrowers with needs in accord with today's part-defense, part-peacetime economy, and without imposing upon lending agencies a burdensome harness of detailed and specific rules and regulations. This has helped keep to a minimum the injustices and inequities which are inescapable under a set of detailed rules and regulations, no matter how carefully drawn, and has preserved the flexibility of movement required by financial institutions if they are to serve the needs of the economy.

The members of the National and regional committees, by arranging to have the Program discussed before financial, business, and trade associations, have contributed to a better understanding of the place of credit in an inflationary environment and the need for restraint in lending operations. It is particularly necessary that borrowers, as well as lenders, become conscious of the need for caution in the use of credit. To the extent that this is achieved the problem of the lender becomes easier—some borrowers withhold requests for loans and the responsibilities of lenders in making the Program effective become less onerous. In a broader sense, the activities of the committees in discussing the need for refraining from unessential credits also contributes actively to the education of the public on inflationary developments and their dangers. As long as the inflationary potential in the economy remains so great, these functions of the committees give aid indirectly to the monetary authorities in their anti-inflationary program. As long as the regional committees display keen interest in and continue to work for the improvement of the Program, it will continue to make a worthwhile contribution toward the defense and anti-inflation programs.

Problems encountered.—The Voluntary Credit Restraint Program, in its short history, has not been without its problems. Attention has already been called to the difficulties encountered in devising lending standards appropriate to a limited defense economy. The voluntary nature of the Program has posed the necessity of obtaining and maintaining the substantial participation required for its continued success. Some criticism has developed in the case of two proposed State bond issues for veterans' bonuses, which did not qualify under the Program. A few lenders have called attention to the difficulty of gaining support for restrictive credit policies on the part of private lenders in the face of continued active lending by public bodies. The sale of large amounts of public housing bonds at a time when efforts were being made to restrain private building has been another source of adverse comment.

In a sense, these criticisms and comments are a good sign; they indicate that lenders are interested in the Program, and are exercising their democratic prerogatives in pointing out what they regard as inconsistencies in the anti-inflation policies. Fortunately, the great majority of the important lenders appear to be sincerely interested in achieving the objectives of the Program and are willing to make reasonable adjustments, if required, in their lending policies. A most encouraging sign is that the easing of inflationary pressures in recent months has not been accompanied by any widespread letdown in the Program or suggestion that it be discontinued. The people who are most active in the Program apparently are of the belief that the underlying inflationary potential in the economy may be substantial, and that the Program should be kept in operation until the inflationary impact of rising defense outlays can be appraised with greater certainty.

Safeguards against collusive action by lenders

Some observers have raised the question as to whether the Voluntary Credit Restraint Program may encourage collusive action on the part of lending institutions. This problem has been kept constantly in mind from the inception of the Program, and numerous safeguards have been incorporated in its organization and operation in order to prevent any such development. Representatives of the Board of Governors attended the conferences in which the basic features of the Program were developed and, in formulating the Program, numerous consultations were held with representatives of the Attorney General and of the Chairman of the Federal Trade Commission. Reference has already been made to the fact that the Program was approved by the Board of Governors and that the Board's request to financing institutions to act in accord with the Program was approved by the Attorney General prior to its release.

The Board of Governors has maintained a continuing interest in and active contact with the Program, with the result that it has been kept informed as to current developments. The Board appointed the National Committee and is required to review and approve any change in the Program and to consult with the Attorney General and the Chairman of the Federal Trade Commission before such change can become effective. In the case of the National Committee, the Chairman, Alternate Chairman, and Secretary are Board personnel and no meetings have been held without their attendance. The minutes of the meetings of the National Committee which list all subjects discussed and indicate the views of the Committee or the action authorized in each case, are open to public inspection and have been reviewed by representatives of the Attorney General.

The regional committees are appointed by the National Committee and a representative of a Federal Reserve Bank is a member of every committee with headquarters in a city in which is located a Federal Reserve Bank or branch. Each such committee includes personnel drawn from a trade or financing area. The regional committees may meet only for the purposes specified in the Program and are required to submit to the National Committee records of matters considered and action taken, including statements of the types of cases considered and the nature of the advice given. These records have been reviewed by a member of the staff of the Board of Governors and by representatives of the Attorney General.

If the basic objective of the Program, namely, restraint upon the extension of nonessential credit, is to be achieved, it necessarily follows that some would-be borrowers, who might normally be in position to obtain credit, may not have their desires fully satisfied. The record indicates that in instances in which this has been the case, it has been because the lending institutions, individually and not collectively, or the regional committees have concluded that the granting of a particular loan would be contrary to the standards, objectives, and philosophy of the Program. The high degree of competition among lending institutions of a given type and among various classes of financing institutions constitutes an effective barrier against collusive action on the part of lenders; no lender is under any legal or industry compulsion to follow the views or judgments of the National or regional committees. In fact, the operation of the Program presupposes the existence of competition among lenders, but aims through voluntary efforts to prevent this competition from diverting credit resources to nonessential purposes.

Fair treatment to competing firms

The Program does not function in a manner which will contribute to unfair treatment as between competing business firms in the extension of credit. The lending standards set forth in the Statement of Principles and in the bulletins of the National Committee relate to the purpose for which the proceeds of a loan are to be used and are nondiscriminatory as between borrowers of the same general class. No specific lending standards have been promulgated which would operate to the detriment of a particular business firm or to the advantage of its competitor.

In a voluntary program operating under fairly general lending standards, some difficulties are necessarily encountered in achieving uniformity in the points of view of the participating lending institutions and even among the regional committees. In case a lending institution has some doubt as to whether a proposed loan is compatible with the Program, it has easy access to guidance from the appropriate regional committee, which undertakes to apply the national lending standards in a consistent and logical fashion. In general, the National Committee has not functioned as an appeal body in passing on or reviewing the opinions of the regional committees. In cases where substantial diversity of opinion has become evident among the latter, the National Committee, at the request of a regional committee, has explored the problem and expressed its point of view for the guidance of the regional committees.

Role of voluntary credit restraint

The final part of the question calls for an appraisal of the role of the Program as a means of restraining inflation under four different sets of conditions: (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future; (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future; (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future; and (*d*) under conditions of total war.

If a voluntary program of credit restraint is to be undertaken with chance of widespread acceptance and support on the part of lenders, several basic conditions in the economy would seem to be required: (*a*) a highly inflationary condition evidenced by a fairly sharp increase in commodity prices; (*b*) widespread and growing speculative fever; (*c*) rapid expansion of private credit; and (*d*) vigorous use of general credit restraints, supplemented by use of selective credit regulation in those specific areas where experience shows such regulation can be effective. Under this combination of circumstances, the dangers of inflation and the need for restraining the growth of credit can be set forth with sufficient directness and force to engender a substantial willingness to cooperate on the part of lending institutions. In the absence of these conditions, it is likely to be difficult to arouse widespread interest among the financial community and to enlist the real measure of general acceptance and support without which a voluntary effort will not achieve substantial success. These basic conditions were present in the months following the outbreak of the Korean war and doubtless contributed to the achievements of the Voluntary Credit Restraint Program.

Price and credit developments in the economy, rather than the Treasury fiscal outlook, are thus the real benchmarks for appraising the need for a voluntary effort at credit restraint. As was the case in the second half of 1950, highly inflationary conditions may develop in the economy in the face of a balanced budget. Thus, even under conditions when the outlook may be for no significant amount of new Treasury borrowing, there may be an important role to be played by a voluntary program of credit restraint. On the other hand, given the same Treasury outlook, conditions in the price and credit sectors of the economy may evidence no significant upward trend of prices and no rapid expansion of credit, and hence little reason for attempting to curtail credit expansion.

The appropriateness of a program of voluntary credit restraint under conditions when the Treasury is facing substantial requirements for new money would likewise depend upon underlying conditions in the economy. If the large Treasury deficit arises out of substantial unemployment or reflects a conscious effort on the part of the authorities to resuscitate the economy through deficit spending, a program of credit restraint aimed at curbing the expansion of private credit would obviously run counter to the objectives of governmental policy. Given these basic conditions in the economy, the need might well be envisaged in terms of credit expansion and the encouragement of spending, rather than the reverse.

The prospect of large Treasury deficits in the midst of practically full utilization of resources of plant capacity and labor and reflecting a substantial increase in the level of Government spending, especially on armament, poses an entirely different set of problems. Under these conditions, governmental policy should be designed to limit credit expansion, to channel credit into necessary uses, and to direct credit away from nonessential purposes—all of which are the underlying objectives of the Program for Voluntary Credit Restraint. Such a program could assist and supplement other anti-inflation policies.

Under the conditions likely to prevail in the world for some time to come, a prospective large Treasury demand for new money enhances the possibility of a resurgence of inflationary pressures. It also poses for the governmental authorities the problem of maintaining a market situation conducive to the sale of Government securities without creating an environment favorable to the rapid and easy expansion of private credit. Faced with these prospects, it would seem appropriate to have available some program of voluntary credit restraint; such a program could be of help to the fiscal and monetary authorities in coping with their vexing problems. To the extent that the expansion of private credit is voluntarily restrained, more funds will be available for investment in Government securities on the part of savings institutions. Also, restraint in lending will mean less liquidation of Government obligations by bank and nonbank holders in an effort to build up their lending power. In turn, this assists the Treasury in its financing operations and the Federal Reserve System in its use of general credit and monetary measures.

Under conditions of total war, there would be a pressing need to channel all available resources of men, machines, materials, and credit into war and essential civilian activities. Strenuous measures would be required to minimize the upward pressure on prices and to curb the expansion of credit. Substantial reliance would be placed upon direct controls over manpower, materials, inventories, construction, and other forms of capital investment, and upon the use of credit for selected purposes. Even with these comprehensive direct controls, however, underlying inflationary pressures would be very strong and the problem of inflation would be so serious as to warrant the use of many and varied instruments of economic and credit control. Under these conditions a program of voluntary credit restraint would be an appropriate and useful supplementary measure; limiting the use of credit to essential purposes would help to curb the upward pressure on the prices of scarce resources and would help to increase the effectiveness of other restrictive measures.

Experience with the Program shows that two related observations deserve special emphasis. The first is that a program of voluntary credit restraint is most useful only under conditions of pronounced inflationary pressure which reflect a large defense program, war, or similar emergency conditions. Under more normal situations reliance should be confined to the use of other credit instruments, especially general credit measures.

The second conclusion is that if a voluntary program is to be of real effectiveness, it must be used in conjunction with other restrictive credit policies of both a general and selective character. A voluntary program is not a panacea, nor will its contribution be of much significance unless it is so supported. A restrictive general credit policy is necessary to establish an environment and a set of conditions under which financial managements will have less desire to pursue aggressive lending policies. Also, selective credit controls, in the limited areas in which their use is appropriate, help to keep the objectives of a voluntary credit program within feasible scope. Given these conditions, a program of voluntary credit restraint can make a unique contribution to the objectives of over-all credit restraint by helping to channel available credit into defense and other essential activities.

Exhibit I

Program for Voluntary Credit Restraint, As Amended to April 20, 1951

Preamble

The task of restraining strong inflationary pressures is one of the most difficult and most important in the whole range of economic problems today. One part of this task—the restraint of unnecessary credit expansion—presents a challenge to the financing institutions throughout the nation.

Section 708 of the Defense Production Act of 1950 authorizes the President to encourage financing institutions to enter into voluntary agreements and programs to restrain credit, which will further the objectives of that Act. By executive order, the President has delegated to the Board of Governors of the Federal Reserve System his authority with respect to financing under this section of the Act upon the required condition that it consult with the Attorney General and with the Chairman of the Federal Trade Commission, and that it obtain the approval of the Attorney General before requesting actions under such voluntary agreements and programs.

At the invitation of the Board, and in company with it, representatives of the American Bankers Association, the Life Insurance Association of America and the Investment Bankers Association of America have been examining the possibilities of this method of credit restraint.

While it is recognized that the proposed Program is addressed only to one limited source of inflationary pressure, the vital importance of this problem to the stability of the economy, and the necessity to extend credit only in such a way as to restrain inflationary pressures outside the financing of the Defense Program should be emphasized to all financing institutions.

It is appropriate to point out that this Program of voluntary credit restraint does not have to do with such factors as inflationary lending by federal agencies, unnecessary spending, federal, state or local, and the wage-price spiral and other much more seriously contributing factors. These should be vigorously dealt with at the proper places. It assumes that the proper governmental authorities will exercise the requisite fiscal and monetary controls.

DEFINITIONS

As used herein:

The terms "financing institution" or "financing institutions" mean banks, life insurance companies, investment bankers engaged in the underwriting, distribution, dealing or participating, as agents or otherwise, in the offering, purchase or sale of securities, and such other types or groups of financial institutions as the Board of Governors of the Federal Reserve System may invite to participate in the Program.

The terms "loan," "loans," "lending" and "credit," in addition to their ordinary connotations, mean the supplying of funds through the underwriting and distribution of securities (either on a firm commitment, agency or "best efforts" basis), the making or assisting in the making of direct placements, or otherwise participating in the offering or distribution of securities.

STATEMENT OF PRINCIPLES

Pursuant to the provisions of Section 708 (a) of the Defense Production Act of 1950, and with the approval of the Board of Governors of the Federal Reserve System in accordance with the functions delegated to it by Section 701 (a) (2) of Executive Order 10161, this Statement of Principles has been drafted to which all financing institutions are asked to conform.

It shall be the purpose of financing institutions to extend credit in such a way as to help maintain and increase the strength of the domestic economy through the restraint of inflationary tendencies and at the same time to help finance the defense program and the essential needs of agriculture, industry and commerce.

Inflation may be defined as a condition in which the effective demand for goods and services exceeds the available supply, thus exerting an upward pressure on prices.

Any increase in lending at a more rapid rate than production can be increased exerts an inflationary influence. Under present conditions of very high employment of labor, materials and equipment, the extension of loans to finance increased output will have an initial inflationary effect; but loans which ultimately result in a commensurate increase in production of an essential nature are not inflationary in the long run whatever their temporary effect may be. It is most important, however, that loans for nonessential purposes be curtailed in order to release some of the nation's resources for expansion in more vital areas of production.

Cooperation with this program of credit restraint makes it increasingly necessary for financing institutions to screen loan applications on the basis of their purpose, in addition to the usual tests of credit worthiness. The criterion for sound lending in a period of inflationary danger boils down to the following: Does it commensurately increase or maintain production, processing and distribution of essential goods and services?

In interpretation of the foregoing, the following types of loans would be classified as proper:

1. Loans for defense production, direct or indirect, including fuel, power and transportation.

2. Loans for the production, processing and orderly distribution of agricultural and other staple products, including export and import as well as domestic, and of goods and services supplying the essential day-to-day needs of the country.

3. Loans to augument working capital where higher wages and prices of materials make such loans necessary to sustain essential production, processing or distribution services.

4. Loans to securities dealers in the normal conduct of their business or to them or others incidental to the flotation and distribution of securities where the money is being raised for any of the foregoing purposes.

This Program would not seek to restrict loans guaranteed or insured, or authorized as to purpose by a Government agency, on the theory that they should be restricted, in accordance with national policy, at the source of guaranty or authorization. Financing institutions would not be restricted in honoring previous commitments.

The following are types of loans which in general financing institutions should not make under present conditions, unless modified by the circumstances of the particular loan so as not to be inconsistent with the principles of this program:

1. Loans to retire or acquire corporate equities in the hands of the public, including loans for the acquisition of existing companies or plants where no overall increase of production would result.

2. Loans for speculative investments or purchases. The first test of speculation is whether the purchase is for any purpose other than use or distribution in the normal course of the borrower's business. The second test is whether the amounts involved are disproportionate to the borrower's normal business operations.[63] This would include speculative expansion of real estate holdings or plant facilities as well as speculative accumulation of inventories in expectation of resale instead of use.

The foregoing principles should be applied in screening as to purpose on all loans on securities not covered by Regulation U or T.

Recognizing that the maximum estimate of the percentage of our 1951 production which will be devoted directly or indirectly to national defense is between 20 percent and 30 percent, a very substantial proportion of the lending of the country will be devoted to the financing of the production and growth of our industrial and commercial community. In these circumstances, it is felt that each financing institution can help accomplish the objectives outlined above by careful screening of each application for credit extension.

In carrying out such screening, financing institutions should not only observe the letter of the existing regulations of the Board of Governors of the Federal Reserve System with respect to real estate credit, consumer credit, security loans, etc., but should also apply to all their lending the spirit of these and such other regulations and guiding principles as the Government may from time to time announce in the fight against inflation.

This Program is necessarily very general in nature. It is a voluntary Program to aid in the over-all efforts to restrain inflation. To be helpful, this Program must rely on the good will of all financing institutions and the over-all intention to comply with its spirit.

PROCEDURE FOR IMPLEMENTING THE PROGRAM

Pursuant to the provisions of Section 708 (b) and (c) of the Defense Production Act of 1950, and upon full compliance with the terms and conditions thereof:

1. A "Voluntary Credit Restraint Committee" (hereinafter referred to as "the Committee") will be appointed by the Board of Governors of the Federal Reserve System (hereinafter referred to as "the Board"). Members shall be appointed for such terms as the Board may prescribe. Initially, the Committee will consist of twelve members, four representing the life insurance companies, four representing the investment bankers, and four representing the banks. The membership of the Committee may from time to time be expanded as deemed advisable or appropriate by the Board to insure adequate representation thereon of other types or groups of financing institutions which may participate in the Program. The Board may appoint one or more alternates from each group to serve on the Committee in case of the absence of a member or members of the Committee representing such group. In selecting and appointing the members of the Committee and alternates, the Board shall have due regard to fair representation thereon for small, for medium and for large financing institutions, and for different geographical areas. The Committee will:

(*a*) With such assistance from the Board and the Federal Reserve Banks as may be necessary, distribute this statement of the Program, including the Statement of Principles, to financing institutions to such extent as may be deemed desirable in view of any distribution previously made;

(*b*) Appoint the subcommittees referred to below in 2;

(*c*) Meet for the purpose of considering the functioning of the Program, advising the Board with respect thereto, and suggesting for the consideration of the Board such changes in the Program, including the Statement of Principles, as may from time to time appear appropriate. Meetings of the Committee shall be held at the call of an official of the Federal Reserve System, designated by the Board; shall be under the chairmanship of such an official; and an agenda for such meetings shall be prepared by such an official. Full and complete minutes of each meeting shall be made by such an official and copies shall be kept in the files of the Board available for public inspection.

(*d*) Issue bulletins or memoranda from time to time to the subcommittees or to financing institutions regarding general matters relating to the Program and

[63] Loans additional to those needed for a borrower's normal business may, of course, be regarded as proper when they are for the purpose of defense production or otherwise conform to the types of loans listed as proper in this Statement of Principles.

related credit problems, including statements implementing or clarifying the Statement of Principles, and describing the types of credits which, in the Committee's opinion, should or should not be regarded as proper under the terms of the Program.

(*e*) Request the chairman of the Committee to designate an employee of the Board of Governors to serve as secretary. Such secretary, in consultation with the chairman of the Committee, is authorized to conduct correspondence on behalf of the Committee in conformity with actions taken by the Committee within the scope of the Program.

2. Subcommittees may be established for each type of financing institution participating in the Program. One of the members of each subcommittee located in any city in which there is a Federal Reserve Bank or branch thereof will be a Federal Reserve representative designated by the Board of Governors of the Federal Reserve System or by such Federal Reserve Bank or branch; and such member shall attend each meeting of the subcommittee. For the investment bankers, the life insurance companies, and the banks there may in each case be one or more subcommittees organized. All such subcommittees will meet only for the purposes specified in the Program; will maintain records of their actions; and will make reports directly to the Committee regarding the actions taken by them, including statements of the types of cases considered and the nature of the advice given. The subcommittees will be available for consultation with individual financing institutions to assist them in determining the application of the Statement of Principles with respect to specific loans for which application has been made to such financing institutions. In consulting with a subcommittee, a financing institution shall not be required to disclose the identity of the applicant for any loan. No financing institution shall be required to consult with any subcommittee with respect to any loan or loans, or any application or applications therefor. Consultation with a subcommittee shall be wholly within the individual and independent discretion of a financing institution. The final decision with respect to making or refusing to make any particular loan or loans shall likewise remain wholly within the individual and independent discretion of each financing institution, whether or not it has consulted with any of the subcommittees.

In setting up the subcommittees, the Committee shall have due regard for fair representation thereon for small, for medium and for large financing institutions, and for different geographical areas. It shall also inform the Board of all subcommittee appointments.

The chairman of each subcommittee will be designated by the Committee and in the absence of such chairman, the subcommittee may elect an acting chairman from among its members. The Committee may appoint one or more alternates to serve at the request of the chairman of a subcommittee in case of the absence of a member or members of the subcommittee. The Federal Reserve Bank or branch, as the case may be, may provide an alternate to the subcommittee member designated by it whenever necessary. Each subcommittee may appoint a secretary who may be a member of the subcommittee or otherwise, and he may conduct correspondence on behalf of the subcommittee in conformity with actions taken by the subcommittee within the scope of the Program.

3. The Committee shall be furnished with such compilations of statistical data on extension of credit by financing institutions as may be required to show the amounts and direction of credit use and to watch the operation of the Program. Such statistics shall be compiled by the Board. To assist the Board in making such compilations, data shall be supplied for the investment bankers, jointly by the Investment Bankers Association and the National Association of Securities Dealers, and for the life insurance companies, jointly by the Life Insurance Association of America and the American Life Convention. Compilations of data made by the Board shall not reveal the identity of individual financing institutions or borrowers. Such compilations shall be kept on file with the Board and shall be available for public inspection.

4. Financing institutions participating in the Program will keep records of individual loans, as to purpose, in such form as to be available for future analysis.

5. Any change in the Program, including the Statement of Principles, shall be passed upon by the Committee and shall be made in accordance with the requirements of Section 708 of the Defense Production Act of 1950.

All actions pursuant to and under the Program will be automatically terminated by all participating financing institutions as of the termination of the authority conferred under Section 708 of the Defense Production Act of 1950; or upon withdrawal by the Board of its request for action under the Program. If the Committee, after study of the operation of the Program, concludes that it is no longer necessary or is not making a substantial contribution to the solution of the problem for which the Program was established, it shall so advise the Board.

REQUEST BY BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM UNDER SECTION 708 OF THE DEFENSE PRODUCTION ACT OF 1950 TO FINANCING INSTITUTIONS TO ACT PURSUANT TO A PROGRAM FOR VOLUNTARY CREDIT RESTRAINT AS AMENDED

This "Request" is addressed to all financing institutions in the United States, including without limitation all individuals, firms, partnerships, corporations, and other organizations of any kind which are engaged in the business of extending credit, making loans, or purchasing, discounting, selling, distributing, dealing in, or underwriting securities, any and all of such institutions being hereinafter referred to as "financing institutions."

Pursuant to the provisions of section 708 of the Defense Production Act of 1950 (hereinafter called the "Act") and of section 701 of Executive Order No. 10161, the Board of Governors of the Federal Reserve System consulted with representatives of financing with a view to encouraging the making of voluntary agreements and programs to further the objectives of the Act. As a result of such consultations, such representatives prepared a "Program for Voluntary Credit Restraint," including as a part thereof a Statement of Principles. The Board of Governors approved the Program and found it to be in the public interest as contributing to the national defense. Certain amendments to the Program have now been suggested by the Voluntary Credit Restraint Committee created under the Program. The Board of Governors of the Federal Reserve System hereby approves these amendments to the Program, approves the Program as thus amended, and finds the Program as thus amended to be in the public interest as contributing to the national defense. The Program as thus amended, which is hereinafter referred to as the "Program," is attached hereto.

Under section 708 of the said Act and section 701 of the said Order, acts or omissions to act pursuant to this Request and the Program which occur while said section 708 is in effect and before the withdrawal of this Request or of the finding of the Board referred to in the preceding paragraph are not construed to be within the prohibitions of the antitrust laws or of the Federal Trade Commission Act of the United States.

The Board of Governors of the Federal Reserve System has consulted with the Attorney General and with the Chairman of the Federal Trade Commission on and before April 5, 1951, said date being not less than ten days before the date of this Request, with regard to the provisions of the Program, the finding by the Board above mentioned, and this Request; and the Attorney General has approved this Request.

Every financing institution in the United States is hereby requested by the Board of Governors of the Federal Reserve System to act, and to refrain from acting, pursuant to and in accordance with the provisions of the Program. The Voluntary Credit Restraint Committee created pursuant to the provisions of the Program, each and every subcommittee created or to be created pursuant to the provisions of the Program, and each and every individual who is or may become a member of the Voluntary Credit Restraint Committee or of any of said subcommittees are hereby requested by the Board of Governors of the Federal Reserve System to act, and to refrain from acting, pursuant to and in accordance with the provisions of the Program.

By order of the Board of Governors of the Federal Reserve System this 20th day of April, 1951.

S. R. CARPENTER, *Secretary.*

EXHIBIT J

DIGEST OF OPINIONS RENDERED BY REGIONAL VOLUNTARY RESTRAINT COMMITTEES ON TYPICAL CASES [64]

The National Committee believes that the release of information on typical cases will assist cooperating financing institutions in conducting their operations in accordance with the principles of the Program. Moreover, the publication of these digests should be of interest to borrowers in planning their operations and to the public at large.

The regional committees have been guided in rendering opinions by standards provided in the Program to the effect that financing institutions should extend credit in such a way as to help maintain and increase the strength of the domestic economy by restricting credit for nonessential purposes and making readily available credit for the essential needs of agriculture, industry, and commerce. In addition they, as well as individual financing institutions, have been aided through the issuance of periodic bulletins by the National Committee interpreting and supplementing the principles of the Program with reference to specific credit areas.

The digest of cases represents in general opinions on cases which have raised doubts in the minds of lenders and have, therefore, been referred to the regional committees. The volume of such opinions has been substantial indicating that the cooperating financing institutions have been diligent in the application of the principles of the Program to the conduct of their every day operations and that their efforts have been effective in reducing the volume of credit for purposes not in harmony with its standards.

Business of borrower and purpose of loan	*Opinion*
SEASONAL AND INVENTORY LOANS	
Wholesale seeds	Favorable.
To buy and clean seeds for resale to retailers of seed for use by farmers in necessary reseeding operations.	
Retail dry goods	Do.
For normal seasonal inventory acquisition.	
Retail hardware, lumber and building supplies	Do.
For normal inventory acquisition to care for summer and early fall trade.	
Retail fuel oil	Do.
To purchase 1 million gallons of fuel oil (one-tenth of annual volume) for storage and sale during the 1951–52 season.	
Public accountant	Do.
Seasonal loan for operating funds.	
Retail hardware	Unfavorable.
To enable borrower to carry inventory disproportionate to his normal business operations.	
Retail sewing machine	Do.
To increase inventory of imported machines in anticipation of future curtailment in domestic manufacture of sewing machines.	
BUILDING PROGRAMS	
Machine tool company	Favorable
To build new plant to take care of present needs. Present rental property too small and unsuitable for increased volume and employment.	
Delicatessen	Do.
To build a new store building to serve a newly developed residential area.	
Retail farm tractor and implement dealer	Unfavorable.
To erect sales and service building in order to retain franchise.	

[64] Released by the Voluntary Credit Restraint Committee, November 13, 1951.

Business of borrower and purpose of loan—Continued

BUILDING PROGRAMS—continued

	Opinion
Grain elevator and feed mill—Sale of feeds and seeds to farmers	Unfavorable.
To erect a new building to replace present facilities which are not very convenient from standpoint of services to customers.	
Municipality	Do.
To erect agricultural-livestock exhibition building.	
Nursing home for aged	Favorable.
To buy existing building which is suitable for needed additional space for operations.	
Mortuary	Do.
To build a new mortuary in replacement of present quarters which are inadequate for needs of community. This is the only mortuary serving the area.	
Tourists' hotel	Unfavorable.
To construct 25 room motel in vacation and recreational area.	
Educational institution	Do.
To finance partially construction of a library.	
Municipality	Favorable.
For construction of needed school buildings. Committee deferred its option on financing for that part of program which extended beyond current fiscal year.	
Church	Do.
To build a new church in replacement of present structure which is in unsafe and hazardous condition.	
Church	Unfavorable.
To build a parish hall and an addition to Sunday School building.	

NEW PLANT OR EQUIPMENT

Publisher of daily newspaper	Favorable.
To purchase a printing press in replacement of outmoded press which does not take care of present requirements.	
Tankship owners	Do.
To purchase oil tanker for charter to an oil company.	
Excavating contractor	Do.
To purchase diesel tractor shovel to replace worn and obsolete equipment now in use.	
Wholesale petroleum	Do.
To buy tractor-tanker units necessary in operation; one replacement and one additional unit.	
Public utility	Do.
For improvements to its gas distribution system.	
Municipality	Do.
For needed fire fighting equipment in rapidly expanding community.	
Laundry	Unfavorable.
To purchase new machinery and equipment for expansion of plant. Deferrable unless program had been started and commitments made prior to inauguration of VCR Program.	
Social club and recreation center	Do.
To purchase bar and equipment together with furnishings for social room. Present facilities not adequate to satisfy demand.	

MODERNIZATION

Farmer	Favorable.
To repair and remodel farm buildings on 176-acre producing farm.	
Retail variety store	Do.
For modernization and enlargement of store building. Approval based on facts that architect's plans drawn and materials contracted for prior to inception of VCR Program.	

Business of borrower and purpose of loan—Continued

MODERNIZATION—continued

	Opinion
Retail ladies' ready-to-wear	Unfavorable.
To modernize store, add new front and increase floor capacity to maintain competitive position.	
Gasoline service station	Do.
For purchase and modernization of equipment and facilities of two existing gas stations.	

WORKING-CAPITAL LOANS

Woodworking—Manufacturer of business fixtures and equipment	Favorable.
For necessary and normal working capital in connection with contract work in process.	
Metal-stamping plant	Do.
For necessary and normal working capital; 65 percent of present volume is under defense contract.	
Shoe manufacturer	Do.
For necessary and normal working capital.	

DEBT RETIREMENT AND REFINANCING

Retail automobile dealer	Do.
To repay existing bank loans.	
Manufacturer of electrical appliances	Do.
For reduction of bank debt.	
Retail milk dealer	Unfavorable.
To refinance existing indebtedness held by former owner of business.	
Chain variety stores	Do.
To retire outstanding preferred stock.	

ACQUISITION OF EXISTING BUSINESSES

Hotel operator	Favorable.
To purchase building and equipment of hotel from owner who is retiring because of ill health. Failure to effect transfer might create hardship for community in having hotel closed. Approval based on assumption self-financing purchaser cannot be found or that seller is unable to accept a purchase-money mortgage.	
Trucking	Unfavorable.
To purchase motortrucking company and equipment for expansion of present operations. Trucking business to be acquired is currently hauling foodstuffs but continued operation by present owner is assured until a sale can be made.	
Pharmacist	Do.
To purchase business, inventory and fixtures of an existing drug store.	
Accountant	Do.
To purchase an established accounting business.	

ACQUISITION OF STOCKHOLDERS' OR PARTNERS' INTERESTS

Individual (officer and principal stockholder—machine-tool manufacturer)	Favorable.
To acquire one-third stock interest in company from widow of borrower's former partner. Proceeds of this loan, used to purchase the minority interest in the company, would preserve continuity of management and avoid the minority stock interest getting into possibly unfriendly hands.	

Business of borrower and purpose of loan—Continued

ACQUISITION OF STOCKHOLDERS' OR PARTNERS' INTERESTS—continued

	Opinion
Retail novelty store	Unfavorable.
To buy other partner's interest in business to become sole owner.	
Wholesale iron and steel	Do.
To purchase minority shareholders' interest.	
Trucking company	Do.
Family group operating company wishes to buy back 51 percent of stock now held by outside interests.	

NEW VENTURES

Retail grocer	Favorable.
To stock a new store to be opened in a new and expanding community now lacking a grocery.	
Retail grocer	Unfavorable.
To stock a new grocery store which facility appears not to be necessary in the community.	
Dentist	Favorable.
To purchase furnishings and equipment necessary to operate a dental office. Borrower recently graduated from dental school.	
Retail men's clothing	Unfavorable.
To open new men's clothing store. City has sufficient retailers to satisfy the demand.	
Retail gasoline distributor	Do.
To equip a new self-service station. Present facilities in community are adequate.	
Amusement park	Do.
For erection of plant and purchase of equipment necessary for operations. Other amusement and recreational facilities are available in area.	

LOANS TO FARMERS, ETC.

Rancher	Favorable.
To purchase and carry cattle.	
Farmer	Do.
To clear 50 additional acres of land for pasturage.	
Farmer	Do.
To purchase 260-acre farm for purpose of putting it into production.	
Farmer	Unfavorable.
To purchase farm land for lease as an investment. Consider speculative in character where the land is already in production and borrower desires simply to increase his holdings of real estate.	

DEVELOPMENT OF LAND

Individual	Favorable.
To purchase acreage for housing developments in a defense area.	
Individual	Unfavorable.
To purchase and develop land for sale as building lots.	
Municipality	Do.
To acquire unimproved land for erection of parking facilities.	

Business of borrower and purpose of loan—Continued

OTHER LOANS

	Opinion
Housewife To buy single-premium life-insurance contract. To provide for purchase of discounted-premium life-insurance contract.	Unfavorable.
Individual To purchase real estate for investment. Property is already financed on a long-term basis.	Do.
State government For payment of bonus to veterans of World War II.	Do.

EXHIBIT K

SURVEY OF BANKER OPINION REGARDING THE OPERATION OF THE VOLUNTARY CREDIT RESTRAINT PROGRAM [65]

In October the Credit Policy Commission submitted a questionnaire to over 100 bankers. Its purposes were in part: (1) to gather information regarding the effect of the Voluntary Credit Restraint Program upon the volume and types of bank loans; and (2) to secure banker reaction to the functioning of the program.

Responses of bankers reflected the difficulty of securing even an approximate statistical measurement of the effects of the Voluntary Credit Restraint Program upon the volume of bank loans in 1951.

There can be no doubt, nevertheless, that the Voluntary Credit Restraint Program exercised an important influence toward damping down credit demand during 1951. Bankers reported many instances where sizable amounts of loans were not granted because they did not conform with the program. Equally important was the fact that many potential credit demands did not reach the negotiation stage. Where businessmen have become familiar with the spirit and objectives of the program, they have often avoided making application for loans of the type that might be considered inflationary under the restraint program. It was apparent from the replies that the program had an important psychological effect upon both banks and customers.

It was evident that there existed a splendid cooperation on the part of customers to follow this program by postponing projects which would not be in conformity with the program. As a whole, the Voluntary Credit Restraint Program has had a very salutary effect upon the lending activities of the banks, and the program is being carried out in a satisfactory manner.

Kinds of loans declined.—While many bankers indicated that their total loans had declined or remained about the same as a year earlier, there had been an increase in loans for defense purposes. The principal types of loans rejected or discouraged included the following: loans for speculative and undue inventory accumulations; loans for speculation in residential building and in real estate purchases; loans to corporations for purchase or retirement of their own stock; loans for the purchase of all or part of existing businesses.

Other types of loans which were disapproved included: loans for the purchase of merchandise not ordinarily carried by the company; loans to start new nondefense businesses; loans for speculating in securities; loans for expansion of nonessential businesses.

Influence of competition upon effectiveness of program.—Bankers were asked to describe the circumstances in any significant cases where either private or government competition appeared to have impaired the effectiveness of the Voluntary Credit Restraint Program in their communities. The intent was to secure some judgment regarding the cynical attitude expressed by critics of voluntary methods that competitive factors would make such a program ineffective.

The general observation was that competitive situations were the exception, rather than the rule. Private and government competition were not impairing the effectiveness of the program as a whole. Individual cases mentioned by bankers involved: loans rejected by one bank, but made by another bank or other financial institution; dissatisfied customers seeking credit from private

[65] A portion of a report prepared for use at the Fourth National Credit Conference by the Research Council and Credit Policy Commission of the American Bankers Association.

lenders who disregard the principles of the program; pressure to make loans not in conformity with voluntary restraint, where NPA authorized the use of critical materials in clearly nonessential enterprises; and loans made by government lending agencies not in accordance with the principles of the program.

Suggestions for improving operation and principles of the program.—The advice of bankers was sought as to how the Voluntary Credit Restraint Program could be improved. Almost all of the suggestions offered were concerned with the public relations aspects of the program. It was evident that because the program of credit restraint is voluntary, it is essential that bankers and businessmen should be well informed regarding its principles and purposes. While many of the suggestions are actually being carried forward by the committee and subcommittees, the necessity for continued interest was stressed by responding bankers.

Some bankers felt that the program should secure more publicity on a national scale, to keep it before the general public. This would help the businessman to be conscious of the program without having it brought to his attention at the time of his request for a loan. At the same time, it was suggested that publicity should continue to provide assurance that credit would be available for essential purposes.

It was also felt that the principles should be reaffirmed. The need for continued interest was evidenced by the suggestion that a summary of principles of the program and of the various bulletins should be distributed widely. Another banker recommended that the chief executive officer of the bank should stress the importance of the program through periodic reminders to lending officers. It was also suggested that case histories should be made available to assist bankers in understanding the principles of the program by showing reasons for approval or disapproval of loan requests.

The need for "grass-roots" cooperation in local communities and through local bankers associations was also stressed. It was recommended that leading bankers should seek the opportunity to address representative groups of business, industry, and professions regarding the broad aspects of voluntary credit restraint, and enlist businessmen and economists to do the same.

Another idea was for cooperation between local banks in the publication of a series of advertisements in newspapers to explain the program. Educational activity has to be concerned not only with the community as a whole, but also with individual customer relations. Some bankers pointed out that it has been their practice to make a full explanation of the purposes of the program available to all customers. Others have given a copy of the Statement of Principles to any customer for whom a nonconforming loan has been disapproved. Another method undertaken has been to forewarn large customers regarding the program when it is believed that they might be contemplating application for credit not in agreement with the program.

43. Discuss the use of moral suasion as a tool of credit control. How has this been used in the cases of member banks and of savings institutions, including life insurance companies?

As a tool of credit regulation, moral suasion in its narrowest meaning can be taken to refer to purposeful influence on credit extensions by the banking and monetary authorities through oral or written statements, appeals, or warnings to all or special groups of lenders. Generally speaking, such influence is exercised through policy statements released through the press and other publications, correspondence, speeches, and testimony before Congressional committees.

Moral suasion, however, can also be said to embrace what is sometimes called "direct action" and "direct contacts" with individual banks or other financial institutions. Direct action is effected through supervisory processes as a result of conditions indicated by reports of examination or investigation and through supervisory discussion or correspondence between Federal Reserve Bank officials and officers of individual member banks or other financial institutions. Direct contacts, in contrast, refer to informal consultations on current credit problems with member bankers and other leaders of the financial community, or to some more formal relationship such as is exemplified under present circumstances by the voluntary credit restraint program.

Moral suasion is not to be confused with the System's provision and publication of information which, as discussed in the answer to Question E–27, is concerned with the systematic analysis and reporting of economic and credit trends. Since an objective of economic intelligence is to broaden public understanding of economic developments and credit and monetary problems and to make credit and monetary policy actions more generally effective because of such understanding, economic information reports may exercise an influence which works to support a given policy. Federal Reserve System views as to emerging national credit problems are inevitably and properly reflected in these reports. In a broad sense there is a continuing informational influence exerted through the objective economic intelligence process to the extent that there is a widespread public recognition of current credit and monetary problems and to the extent that the lending and investing policies of banks and other private financial institutions take account of this information.

Moral suasion in its narrower sense has been used as an instrument of credit influence on a number of occasions, but chiefly in periods of strong inflationary pressures. Usually the action has been addressed primarily to commercial banks and indirectly to other lenders. In late 1919 and early 1920 the Board was concerned about the inflationary trends that were prevalent and issued warnings that Federal Reserve credit should not be used either directly or indirectly to finance speculation. In its Annual Report for 1923, the Board of Governors strongly expressed its preference for "productive credit" as contrasted to "credit for either investment or speculative purposes."

A classic instance of the use of moral suasion in its more limited sense as a part of credit and monetary policy occurred during the expansion of speculative credit in the late twenties. At that time the Board in statements, in its monthly Bulletins, and in its Annual Reports stressed the danger of excessive speculative loans, particularly insofar as such loans restricted the availability of funds for commercial purposes.

More recent examples of the use of moral suasion by the publication of views and opinions occurred in 1942, 1947, and the current national defense emergency. In 1942 banks were asked in a formal announcement by the Board of Governors of the Federal Reserve System, the Comptroller of the Currency, and the Federal Deposit Insurance Corporation to encourage the reduction of personal indebtedness incurred for nonproductive purposes through amortization of bank loans and to curtail credits for the accumulation of inventories of civilian goods.

In 1947 Federal bank supervisory agencies and the Executive Committee of the National Association of Supervisors of State Banks issued a joint statement stressing the role of continued bank credit expansion in the inflationary development at that time. The agencies strongly urged bankers to "curtail all loans whether to individuals or businesses for speculation in real estate, commodities, or securities" and to confine further bank credit extension to "financing that will help production rather than merely increase consumer demand."

Since the outbreak of hostilities in Korea, the Board has taken several specific actions to restrain credit expansion through moral suasion, narrowly defined. In August 1950, it joined with other Federal and State supervisory agencies in urging the cooperation of banks and other lenders in restraining their lending and investment activities. This followed an earlier statement by leaders of private financial groups, including the American Bankers Association, which cautioned their members against extension of credit that would contribute to inflationary pressures. In November of the same year the Chairman of the Board addressed a personal letter to all member banks requesting their utmost cooperation in helping to achieve the objectives of the August appeal.

With respect to so-called direct action with member banks carried on by the Federal Reserve Banks, these are grounded in the directives of the Federal Reserve Act that the Reserve Banks shall keep themselves informed as to bank lending and investment trends which are speculative or otherwise inconsistent with the maintenance of sound credit conditions. Such action is effected through supervisory discussion or correspondence with individual bankers. In 1929, an attempt was made by the Federal Reserve Board and the Reserve Banks to restrain through direct action with member banks the expansion of speculative credit. It was insisted that member banks which had a significant portfolio of stock market loans and were in debt to the Reserve Banks either liquidate their indebtedness or reduce their stock market loans. This was done through specific warnings to individual banks. Individual banks generally, of course, did not borrow for the purpose of making stock market loans, but it could be said that, when banks did borrow to meet losses of reserves, they obtained funds which supported whatever credit extensions they made. The use of direct action as a monetary instrument in 1929 was of short duration and its results were inconclusive.

In 1942 when the Federal bank supervisory authorities requested banks to curtail credit, as discussed earlier in this reply, bank examiners were instructed to ascertain what was being done by individual institutions to comply with this request, to urge compliance wherever necessary, and to explain the reasons for the request where it appeared to be misunderstood. Examiners were also instructed to comment in their reports of examination regarding the extent of cooperation and the effectiveness of action taken by individual institutions.

Direct contacts involve general credit discussions at group meetings of bankers and representatives of nonbank savings institutions, including life insurance companies. Such direct contacts have the purpose of impressing upon member banks and other lenders the public interest aspects of credit processes, of stressing the importance of sound credit conditions for national stability, and of cultivating a sense of participation in the solution of local, regional, and national credit problems. The extent to which the mechanism of direct contacts is relied upon will vary from one Federal Reserve Bank to another but all of them engage in such relations. A constructive byproduct of these efforts is to put the Reserve Bank officials in a position to supply important regional information as background material for System policy formulation.

During the early thirties direct contacts were used extensively to stress on member banks the desirability of easier credit conditions. They involved, at first, efforts to keep banks and other lenders from contracting credit through restrictive action, and later to encourage them to make additional credit more readily available, particularly to small businesses, as a means of contributing to economic recovery. In the period of strong inflationary pressures since World War II, direct discussions with lenders have included explanation of such pressures, the role of bank and other credit in generating them, and special cautions about the extension of loans in such a period, particularly those types of business, consumer, and real estate loans that involve higher than average risks.

The most recent and most formalized use of direct contacts has been under the voluntary credit restraint program, which includes insurance companies, investment banks, mutual savings banks, and savings and loan associations as well as commercial banks. This organized effort at direct contacts was instituted under authority granted by the Defense Production Act of 1950 and has the objective of encouraging lenders to limit the use of private credit for nonessential and speculative purposes and thus to help restrain inflationary pressures from this source during the period of the national defense emergency. In the answer to Question F-42, the voluntary credit restraint program is described and evaluated at some length.

Moral suasion in the broad sense, including direct action on and direct contacts with lenders, is only a supplementary means of implementing general as well as selective measures of credit and monetary policy. Moral suasion has been, and should be, used with caution and only when circumstances require whatever additional support it can give to other credit measures. The limitations of this means of credit influence should not be minimized. The effectiveness of dealing with individual banks or groups of banks and other lenders is more limited in this than in most other countries because the presence here of many banks and other lenders involves a lesser degree of uniformity of view and practice, and consequently requires greater efforts to demonstrate a community of interest and to attain a desired degree of cooperation among the institutions to which moral suasion is directed. Moral suasion, moreover, is liable to work inequitably as between those who are patriotic, sensitive to public opinion, or hold a conspicuous community position, on the one hand, and those not having those characteristics, on the other hand. It is less subject to public scrutiny and less amenable to general rules and standardization than other credit policy approaches. There is the risk, too, that it may be used as a substitute for a necessary application of the more pervasive and impersonal credit measures operating through the mechanism of the money market.

The specific effectiveness of moral suasion in curbing or easing credit expansion cannot be assessed in quantitative terms. The current voluntary credit restraint program, which embraces most major types of lenders and has been in operation during a period when the Federal Reserve has applied a combination of general and selective credit restraints, appears to have had a salutary influence, whereas various past appeals to commercial banks alone in periods of limited reliance on other policy instruments appear to have effected little influence. In general, experience in both inflationary and recession times seems to show that unless moral suasion is accompanied by the vigorous use of other available credit instruments, it fails to accomplish significant results.

44. What is the function of bank reserves? What are present reserve requirements with respect to banks?

The present function of reserves.—Although historically reserve requirements were imposed to assure the ability of individual banks to meet deposit withdrawals on demand, the most important functions of reserves and reserve requirements are now recognized to lie in their influence on the volume of bank credit and money and their role in monetary stability.

Commercial banks in this country are required by Federal and State laws to maintain reserves equal to prescribed percentages of their deposits. As explained in the reply to Question F–28, additional bank deposits are created when the banking system increases its loans or investments and, unless reserves are already in excess of legal requirements, additional reserves must be provided against such deposits. Consequently, the volume of bank credit, and therefore the amount of bank deposits—the chief component of the money supply—is limited by the volume of bank reserves and the currently prescribed reserve requirements. When a given amount of reserves becomes available, the banking system as a whole tends to expand the volume of credit and money by a multiple of the new reserves; conversely, a reduction in the total volume of reserves, if not replenished by borrowings or sales of securities, tends to induce a contraction of bank credit.

Reserve requirements are imposed on banks in the public interest, as well as in the interest of the entire banking system. They serve to assure the public that bank deposits have backing in part in other forms of money and, therefore, can be readily transferred between individual banks and readily converted into other forms of money—i. e., a public confidence and convertibility mechanism function. They provide a known limit to the deposit expansion potential of a given volume of newly available bank reserves, and thus they set a ceiling for prospective expansion of bank credit—i. e., an inflation safeguard function. Finally, they permit an active public credit and monetary policy to influence adaptations in the credit and money supply to the economy's needs for financing its output at fairly stable prices—i. e., a monetary stability function. From the standpoint of the individual bank, its required reserves are assets that cannot be loaned or invested to earn an income. The cost to the individual bank of carrying such reserves is a cost of engaging in the banking business, a cost imposed by legislation in protection or furtherance of the public interest.

From the point of view of sustaining a dynamic economy with constantly rising levels of output, employment, and consumption, the inflation safeguard and monetary stability functions are by far the most important functions of bank reserves and reserve requirements. The national mechanism established for facilitating and assuring the performance of these functions is the Federal Reserve System. Through its open market and discount activities, the System can increase or decrease the volume, availability, and cost of reserve funds to the banking system. Through changes in reserve requirements, the System can limit or increase the expansion potential of funds available for meeting bank reserve requirements, and thereby help to safeguard against future monetary inflation or set in motion forces to curb monetary contraction and initiate monetary expansion. These operations exert a spreading secondary influence on the availability, cost, and volume of bank and other credit throughout the entire economy. Depending on business and credit conditions, they may have a restrictive effect on inflationary pressures, a cushioning effect in economic readjustment, or a stimulative effect in fostering economic expansion.

Historical functions of reserves.—In American banking history reserve requirements were imposed principally to assure the ability of individual banks to meet deposit withdrawals on demand. To some extent they also had an inflation safeguard function.

In the course of time, it became evident that reserves alone were not an adequate protection to banks and their depositors. Gradually it became more clearly understood that the liquidity of bank deposits depended much more upon the availability of a central reservoir of funds, to be drawn upon in case of need, than upon the legal reserves of individual banks. What was needed was a reserve banking lender, an institution to provide over-all liquidity to bank deposits by being in a position to provide additional money and reserves in emergencies.

To meet this need was one of the primary purposes for which the Federal Reserve System was established. By lending to member banks or by buying Government securities or certain kinds of commercial paper in the open market, the Federal Reserve System creates member bank reserves in the form of deposits at the Reserve Banks. To meet the economy's needs for hand-to-hand cash, member banks may convert these reserve deposits into Federal Reserve notes or other United States currency.

The discount and open market mechanisms were the original means given to the Federal Reserve System to exercise a regulatory influence over the volume of deposits which member bank lending and investing activities could create. Actual development of this use of the open market mechanism, however, did not get under way until the twenties. In the thirties, the Federal Reserve was given a further mechanism of influence through the authority to vary the reserve requirement percentages, of member banks within prescribed statutory limits.

The changes in concepts and in legal provisions gave bank reserves and reserve requirements a new significance. Instead of serving primarily as an individual bank's main guaranty of readiness to honor its obligations, they became the means by which public policy exerts a restrictive or expansionary influence, as public economic interest directs, on the ability of banks to extend credit and expand deposits while at the same time meeting the public's demand for currency for hand-to-hand transactions.

Past changes in reserve requirements.—Authority to change reserve requirements as a supplementary instrument for influencing credit and monetary trends is less than two decades old. In this period the effective operation of the system of fractional reserve requirements has been subjected to extraordinary influences, including a five-fold increase in the supply of reserves in the thirties due to the revaluation and inflow of gold; a tremendous increase in required reserves in the forties when bank deposits were created to finance a substantial portion of the cost of World War II through the banking system; and the accumulation by the banking system during wartime of a large investment in Government securities which, until recently, could be converted into reserves practically at the will of the banks. The use of the reserve requirement instrument in these periods of extraordinary changes in the supply of and need for reserves makes it difficult to judge how reserve requirement changes might best be used as an instrument of credit influence in more nearly normal periods; the use of this instrument, in other words, is still in an experimental stage.

As explained in the answer to Question C–18, however, experience with the reserve requirement instrument up to the present time has shown it to be inherently less flexible than the discount and open market instruments, at least under conditions where restraint on credit expansion is desirable, and therefore this instrument has tended to be used less to meet short-run changes in credit conditions and more to make adjustments to unusual and large changes in bank reserve positions brought about by special conditions. This inflexibility has resulted principally from the fact that a change in reserve requirements immediately and directly affects every member bank, or at least every member bank in one or more of the three reserve classifications (central reserve city, reserve city, and country banks). No account can be taken of the situation of individual banks, no matter how much they may merit exceptions. To avoid unnecessary hardships so far as possible, exhaustive studies or time-consuming tests have usually been made before increasing reserve requirements. The delay itself has tended to weaken the effectiveness of the action eventually taken. Action has also been inhibited by competitive considerations, because corresponding changes have not been made in nonmember bank reserve requirements except in a few States and such requirements in any event may be satisfied by existing or additional balances with correspondent banks.

Authority to make changes in member bank reserve requirements for credit and monetary regulation purposes was first granted to the Federal Reserve Board of Governors on a temporary basis in 1933. In 1935, this authority was made permanent and more usable. The authority was first applied in 1936 and 1937 when reserve requirements were increased to offset the effect of the large gold inflow in the early thirties, which unduly expanded the credit and monetary potential of the country. A downward adjustment in requirements was made in early 1938 because of business recession, despite large and rapidly increasing excess reserves of member banks. No further changes in reserve requirements were made until just before the outbreak of the war when, to put the System in closer effective contact with current credit developments, reserve requirements for each class of member banks were raised to the maximum permitted by statute—26 percent against demand deposits for central reserve city banks, 20 percent for reserve city banks, and 14 percent for country banks, with 6 percent against time deposits for all classes of banks. During 1942, in facilitating the program of war finance, successive reductions were made in the reserve requirements of central reserve city banks to a level equal to the maximum requirements for reserve city banks.

This structure of reserve requirements was maintained until 1948. In an effort to combat inflationary pressures of that period, when discount and open market policy was immobilized for restrictive use as a result of Federal Reserve purchases of Government securities at predetermined prices, reserve requirements at central reserve city banks were raised twice in the first half year. Following the enactment by Congress in the summer of that year of a special and temporary supplemental reserve requirement authority—an authority granted to serve as a partial substitute for flexible open market and discount policy—reserve requirements at all member banks were raised in the early autumn. An increase in discount rates preceded this action, but the discount rate under the then prevailing circumstances of minimum member bank borrowing was in no sense an effective rate in the market. In each instance during the year, member banks adjusted to increases in reserve requirements largely by sales of Government securities. Offsetting Federal Reserve purchases of such securities under the prevailing open market policies operated to temper or prevent restrictive credit effects.

When recession in business activity became evident in the spring of 1949, the System responded with successive reductions in reserve requirements. Also, the supplemental reserve requirement authority granted the year before expired at midyear with some automatic reduction in reserve requirements at that time. The easing effects of these actions on credit conditions were marked. Under existing open market policies, these actions also had some effect in reducing Federal Reserve holdings of Government securities and the volume of member bank reserves.

In recognition of the need for limiting the expansion of purchasing power based on credit after the outbreak of hostilities in Korea, the Federal Reserve System took several steps to restrain the expansion of bank credit. This included increasing reserve requirements early in 1951. The increase absorbed a large volume of reserves that banks usually get at that time of year as a result of the post-holiday return of currency from circulation. While the effect of the increase was not immediately pronounced because of Federal Reserve support of the Government securities market, it contributed, along with other credit restraint measures in operation at the time, to the leveling off in business loans that occurred in the spring and summer of 1951.

Present reserve requirements.—Member banks of the Federal Reserve System must carry their reserves on deposit with Federal Reserve Banks. Nonmember banks carry their reserves for the most part on deposit with correspondent banks, but vault cash and, where State law permits, specified kinds of securities may also be counted as reserves. Member banks also hold vault cash and maintain large balances with other banks but these cannot be counted as a part of their required reserves.

Reserve requirements of member banks in effect on January 1, 1952, and the minimum and maximum requirements prescribed by law, were as follows:

Member bank reserve requirements

Class of bank	Percent of demand deposits			Percent of time deposits		
	In effect Jan. 1, 1952	Statutory		In effect Jan. 1, 1952	Statutory	
		Minimum	Maximum		Minimum	Maximum
Central reserve city banks	24	13	26	6	3	6
Reserve city banks	20	10	20	6	3	6
Country banks	14	7	14	6	3	6

Reserve requirements applicable to banks not members of the Federal Reserve System vary from State to State, as shown in Tables XI and XII. In most States the nonmember bank reserve requirements—as percentages of deposits—appear, superficially, to be about the same as member bank requirements. There are important differences, however, between member and nonmember bank requirements, that are reflected not so much in the prescribed reserve percentages as in the composition of reserves. The bulk of nonmember bank reserves consist of balances on deposit with other commercial banks, and the funds deposited can be loaned or invested by the depositary banks. Such balances, moreover, serve not only as reserves but also as working balances with correspondents which can be used for a variety of interbank transactions. In some States specified kinds of securities may be counted as part of the required reserve. Vault cash is the only fully effective reserve under State laws, and only 11 States require any such reserve.

These points are discussed more fully in the reply to Question F–45.

TABLE XI.—*State reserve requirements for commercial banks and trust companies, Nov. 1, 1951* [1]

SEC. A.—REQUIREMENTS FOR SO-CALLED COUNTRY BANKS, I. E., BANKS NOT DESIGNATED OR APPROVED AS RESERVE DEPOSITARIES, NOT LOCATED IN CENTRAL RESERVE OR RESERVE CITIES, ETC.

State	Required reserves (percent of deposits specified)			Composition of reserve required on demand deposits (percent of demand deposits)			Composition of reserve required on time deposits (percent of time deposits) [2]		
	Uniform requirements on demand and time deposits	Different requirements on—		Vault cash	Either balances with depositary banks or vault cash	Securities, balances with depositary banks, or vault cash [3]	Vault cash	Either balances with depositary banks or vault cash	Securities, balances with depositary banks, or vault cash [3]
		Demand deposits	Time deposits [2]						
Alabama		15	4	0	15	0	0	4	0
Arizona		10	5	0	10	0	0	5	0
Arkansas	[4] 15			[4] 0	15	0	[4] 0	15	0
California		12	5	[5] 6	6	0	[5] 1	0	4
Colorado	15			[6] 0	12	[6] 3	[6] 0	12	[6] 3
Connecticut		14	0	2	10	2	0	0	0
Delaware		14	6	0	14	0	0	6	0
District of Columbia		20	6	0	[7] 20	0	0	[7] 6	0
Florida	20			0	0	20	0	0	20
Georgia		15	5	0	15	0	0	0	5
Idaho	15			0	10	5	0	10	5
Illinois	([8])	([8])	([8])						
Indiana		12.5	3	0	12.5	0	0	3	0
Iowa		7	3	1.05	5.95	0	.45	2.55	0
Kansas [9]		12.5	5	0	12.5	0	0	5	0
Kentucky		7	3	2.33	4.67	0	1	2	0
Louisiana		20	0	0	20	0	0	0	0
Maine		14	6	0	14	0	0	6	0
Maryland		15	5	0	15	0	0	0	5
Massachusetts		15	0	3	6	6	0	0	0
Michigan	12			0	12	0	0	0	12
Minnesota		12	5	0	12	0	0	5	0
Mississippi		15	7	0	15	0	0	7	0
Missouri		15	3	0	15	0	3	0	0
Montana	10			0	10	0	0	10	0
Nebraska		15	5	0	12	3	0	4	1
Nevada	15			0	15	0	0	15	0
New Hampshire		15	5	0	15	0	0	0	5
New Jersey		15	5	1.5	13.5	0	.5	4.5	0
New Mexico	12			0	12	0	0	12	0
New York		14	6	0	14	0	0	6	0
North Carolina		15	5	0	15	0	0	5	0
North Dakota		10	5	0	10	0	0	5	0
Ohio		15	10	0	15	0	0	4	6
Oklahoma		15	5	0	15	0	0	5	0
Oregon		15	5	0	15	0	0	5	0
Pennsylvania		14	6	0	8.4	5.6	0	3.6	2.4
Rhode Island		15	0	6	9	0	0	0	0
South Carolina		7	3	0	7	0	0	3	0
South Dakota	17.5			0	7	10.5	0	7	10.5
Tennessee		10	3	0	10	0	0	3	0
Texas		[10] 15	5	0	15	0	0	5	0
Utah		15	5	1.88	13.12	0	1.25	3.75	0
Vermont		30	8	0	12	18	0	3.2	4.8
Virginia		10	3	0	10	0	0	3	0
Washington	15			0	15	0	0	15	0
West Virginia		10	5	2	8	0	1	4	0
Wisconsin	12			0	8	4	0	8	4
Wyoming		20	10	0	20	0	0	10	0

[1] In most cases the percentage requirements shown are prescribed in the State law itself. Where the law empowers banking authorities to change reserve requirements, the percentages shown are those which were actually in effect; the minimum and maximum reserve percentages which may be prescribed in those States are shown in Table XII.

[2] The reserve requirements shown in the "Time deposits" columns for Arizona, California, Connecticut, Massachusetts, Nebraska, Rhode Island, Utah, and Wyoming apply only to deposits in the savings departments of commercial banks and trust companies. Other time deposits are subject to higher requirements, but inspection of State banking department annual reports indicates that such deposits in California, Connecticut, Massachusetts, and Rhode Island State commercial banks and trust companies are relatively small in comparison with deposits in their savings departments.

[3] Securities eligible as reserves are U. S. Government obligations and, in some States, States and municipal obligations.

[4] An unspecified "part of" the reserve must be in the form of vault cash. There is a 50-percent reserve requirement for banks in places with less than 1,500 population, with capital of $10,000 or more but less than $25,000.

[5] Either vault cash or demand deposits with the Federal Reserve Bank of San Francisco.

[6] A reserve of not less than 3 percent must be held in the form of cash and/or U. S. Government obligations. The remainder may be held with reserve depositary banks.

[7] Vault cash may not be counted as part of the required reserve.

[8] No statutory reserve requirements.

[9] For trust companies the reserve requirements are 25 percent of demand and 10 percent of time deposits, but there are no trust companies in the State.

[10] There is a 20 percent requirement for banks with capital stock of less than $25,000.

SEC. B.—REQUIREMENTS FOR BANKS DESIGNATED OR APPROVED AS RESERVE DEPOSITARIES, ETC., AS DEFINED IN THE NOTE BELOW OR AS DESCRIBED UNDER THE RESPECTIVE STATES

State	Required reserves (percent of deposits specified)			Composition of reserve required on demand deposits (percent of demand deposits)			Composition of reserve required on time deposits (percent of time deposits)		
	Uniform requirements on demand and time deposits	Different requirements on—							
		Demand deposits	Time deposits [1]	Vault cash	Either balances with depositary banks or vault cash	Securities, balances with depositary banks, or vault cash [2]	Vault cash	Either balances with depositary banks or vault cash	Securities, balances with depositary banks, or vault cash [2]
Arkansas	20	--------	--------	8	12	0	8	12	0
California: Banks in places with populations of—									
100,000 or more	--------	18	5	[3] 9	9	0	[3] 1	0	4
Under 100,000	--------	15	5	[3] 7.5	7.5	0	[3] 1	0	4
Colorado	--------	20	6	[4] 0	16	[4] 4	[4] 0	4.8	[4] 1.2
Iowa	--------	10	3	1.5	8.5	0	.45	2.55	0
Kansas	--------	12.5	5	0	12.5	0	0	5	0
Kentucky	--------	10	3	3.33	6.67	0	1	2	0
Massachusetts	--------	20	0	4	8	8	0	0	0
Minnesota	--------	15	5	0	15	0	0	5	0
Mississippi	--------	25	10	0	25	0	0	10	0
Missouri: Banks in places with populations of—									
200,000 or more	--------	18	3	7	11	0	3	0	0
25,000 to 200,000	--------	15	3	6	9	0	3	0	0
Montana	15	--------	--------	0	15	0	0	15	0
Nebraska	--------	20	5	0	16	4	0	4	1
Nevada	15	--------	--------	0	15	0	0	15	0
New York: Manhattan Borough:									
Downtown area	--------	24	6	0	24	0	0	6	0
Uptown area, and Buffalo	--------	20	6	0	20	0	0	6	0
Oklahoma	--------	18	5	0	18	0	0	5	0
Utah	--------	20	5	2.5	17.5	0	1.25	3.75	0
Wisconsin	20	--------	--------	0	13.33	6.67	0	13.33	6.67

[1] The reserve requirements shown in the "Time deposits" columns for California, Massachusetts, Nebraska, and Utah apply only to deposits in the savings departments of commercial banks and trust companies. Other time deposits are subject to higher requirements, but inspection of State banking department annual reports indicates that such deposits in California and Massachusetts State commercial banks and trust companies are relatively small in comparison with deposits in their savings departments.

[2] Securities eligible as reserves are U. S. Government obligations and, in some States, State and municipal obligations.

[3] Either vault cash or demand deposits with the Federal Reserve Bank of San Francisco.

[4] A reserve of not less than 3 percent on demand deposits and 1 percent on time deposits must be held in the form of cash and/or U. S. Government obligations. The remainder may be held with Reserve depositary banks.

NOTE.—In States not listed in this section or in this note, the reserve requirements shown in Sec. A are applicable to all State commercial banks and trust companies. The requirements shown in this section apply to banks designated or approved as reserve depositaries, banks in central reserve or reserve cities, banks in specified cities, and banks in cities with specified population, as follows:

Arkansas: The 20 percent requirement applies to banks designated as reserve agents.

California: The requirements shown above apply only to reserve depositaries. For banks that are not reserve depositaries, located in places with population of 50,000 or more, the requirements are the same as shown above except that the vault cash requirement is only 6 percent and the portion which may be carried with depositary banks is correspondingly larger. For banks that are not reserve depositaries located in places with population under 50,000, see Sec. A.

Colorado: The requirements apply to banks designated as reserve agents.

Iowa: The requirements apply to banks in reserve cities (designated as such under the Federal Reserve Act).

Kansas: A 20 percent reserve is required against demand deposits due to banks; the 12.5 percent requirement applies to other demand deposits.

Kentucky: The 10 percent requirement on demand deposits applies to banks in reserve cities. There is a 13 percent requirement against demand deposits for central reserve city banks, but there is no central reserve city in the State.

Massachusetts: The requirement applies to trust companies doing business in Boston and less than 3 miles from the State House.

Minnesota: The requirements apply to banks in reserve cities (designated as such under the Federal Reserve Act).

Mississippi: The requirements apply to banks in places with population over 50,000.

Montana: The requirement applies to banks approved as reserve depositaries.

Nebraska: The requirements apply to banks in cities with population of 25,000 or more.

Nevada: A 25 percent reserve is required against deposits due to banks; the 15 percent requirement applies to other demand deposits.

Oklahoma: The requirements apply to approved depositaries.

Utah: The requirements apply to banks in places with population of 50,000 or more.

Wisconsin: The requirement applies to banks designated as reserve depositaries.

TABLE XII.—*Basic statutory reserve requirements, actual requirements on Nov. 1, 1951, and minimum and maximum requirements prescribed by law, for State commercial banks and trust companies in States in which banking authorities are empowered to change reserve requirements*

State	Percent of demand deposits				Percent of time deposits			
	Basic	Actual	Minimum	Maximum	Basic	Actual	Minimum	Maximum
Alabama [1]					1	4	1	5
Arizona	10	10	10	20	5	5	5	10
Arkansas [2] [3]	15	15	15	FR	15	15	15	FR
California: Banks in places with population of—								
100,000 or more	18	18	18	FR	5	5	5	FR
50,000 to 100,000 [4]	15	15	15	FR	5	5	5	FR
Elsewhere	12	12	12	FR	5	5	5	FR
Connecticut [5]	12	14	12	(6)	0	0	0	0
Delaware	7	14	7	FR	3	6	3	FR
District of Columbia	FR	20	FR	FR	FR	6	FR	FR
Kentucky:								
Reserve cities [7]	10	10	10	20	3	3	3	6
Elsewhere [7]	7	7	7	14	3	3	3	6
Maine	15	14	(6)	FR	0	6	0	FR
Maryland	15	15	15	30 FR	3	5	3	6 FR
Massachusetts [5]:								
Boston [8]	20	20	(6)	(6)	0	0	0	0
Elsewhere	15	15	(6)	(6)	0	0	0	0
Michigan [2]	12	12	12	24	12	12	12	24
Minnesota [9]	12	12	12	FR	5	5	5	FR
Nevada [2]	15	15	15	(6)	15	15	15	(6)
New Hampshire	15	15	(6)	FR	5	5	[10] 5	[10] 5
New Jersey	15	15	15	30	3	5	3	6
New Mexico [2]	12	12	12	15	12	12	12	15
New York:								
Manhattan Borough, downtown area	13	24	13	FR	0	6	0	FR
Manhattan Borough, uptown area	13	20	13	FR	0	6	0	FR
Brooklyn and Bronx Boroughs	10	14	10	FR	0	6	0	FR
Buffalo	10	20	10	FR	0	6	0	FR
Elsewhere	7	14	7	FR	0	6	0	FR
North Dakota	10	10	10	20	5	5	5	10
Ohio	15	15	(6)	(6)	10	10	(6)	(6)
Oregon	15	15	12	30	5	5	4	10
Pennsylvania	15	14	(6)	30	7.5	6	(6)	15
Utah:								
Large cities [11]	20	20	20	40	5	5	5	10
Elsewhere	15	15	15	30	5	5	5	10
Vermont	15	30	9	30	3	8	2	8

FR: This symbol standing alone signifies that the State law provides that the maximum and/or minimum shall be the same as prescribed by Federal authorities for member banks; where the symbol appears with a percentage, the requirement prescribed by State authorities may not exceed either that percentage or the corresponding requirement applicable to member banks.

[1] The provision for changes in reserve requirements by the State banking board applies only to time deposits.

[2] In Arkansas, Michigan, Nevada, and New Mexico identical requirements apply to demand and time deposits. However, in Michigan the entire reserve on time deposits may consist of U. S. Government securities.

[3] Neither these percentages nor the authority to change requirements extends to banks designated as reserve agents. The requirement for such banks is 20 percent against demand and time deposits.

[4] The requirements apply also to banks that are reserve depositaries located in places with population under 50,000.

[5] In Connecticut a 6 percent requirement is applicable to time deposits in the commercial department, and in Massachusetts the demand deposit requirement applies to certain time deposits in the commercial department. This table, however, shows zero requirements against time deposits, because the deposits in savings departments (of departmental banks) comprise all but a relatively small portion of their time deposits.

[6] None specified in the law.

[7] The State law prescribes higher requirements for banks in central reserve cities, but there are no such cities in the State.

[8] Applies to banks in Boston and within 3 miles of the State House.

[9] Power to change reserve requirements expires Mar. 15, 1953.

[10] The range of reserve requirements on time deposits in the commercial department is from 5 percent to the Federal Reserve maximum, but the reserve requirement on deposits in savings departments of commercial banks is the same as fixed for savings banks, namely, 5 percent.

[11] Banks in cities with a population of 50,000 or more.

NOTE.—In Colorado (not listed above) the law provides that the reserve requirements applicable to Colorado banks designated as "reserve banks" shall be identical with those applicable under the Federal Reserve Act to member banks in reserve cities. Consequently, they change automatically as and when reserve requirements of reserve city member banks are changed by the Board of Governors of the Federal Reserve System. In Florida (not listed above) the law provides that the comptroller may from time to time formulate and promulgate reasonable rules and regulations governing the conduct of State banks, which shall have the force and effect of law, and he shall have power to enforce the same. This authority has never been used by the comptroller to increase or lower bank reserve requirements.

45. Should nonmember banks be required to maintain the same reserves as member banks? Why, or why not?

As discussed in the reply to Question F-44, reserve requirements are part of the mechanism for regulating the volume, availability, and cost of credit and money. Primary responsibility for such regulation rests with the Federal Reserve System which is empowered through its general instruments of credit policy to increase or decrease the availability and volume of reserves of the member banks. Present statutory reserve requirements differ not only as between central reserve city member banks, reserve city member banks, and country member banks, but also as between member banks as a group and nonmember banks. The volume of deposits which can be supported by a given volume of reserves varies not only with respect to the category of the member banks which hold them but even more importantly with respect to whether they are held with a member or a nonmember bank.

In this situation, a shift of deposits as between different classes of member banks and nonmember banks can set in motion forces tending toward credit ease or restraint in the absence of any change in Federal Reserve operations, or movements in gold, currency, or Treasury balances. In addition, the reserve requirements of nonmember banks are in many instances less onerous than those of member banks. Since both types of banks frequently compete for the same business and the same customer, the difference in reserve requirements has two important effects. First, it gives nonmember banks a competitive advantage that tends to weaken their incentive to join the Federal Reserve System and thus to obtain membership privileges, notably full access to Federal Reserve discount facilities. Second, it provides an inducement for member banks to withdraw from the Federal Reserve System, particularly should the System, in an endeavor to restrain inflationary pressures, resort to an increase in reserve requirements.

Thus, the existence of differing reserve requirements as between member and nonmember banks raises the same sort of basic problems with respect to potential credit expansion as do the differing reserve requirements as between categories of member banks. In addition, however, such differences raise competitive problems between the two types of banks that may tend to disturb or weaken the banking structure, either by inducing nonmember banks to retain that status or by providing an incentive for member banks to withdraw from membership. In an ideal situation, both problems would be dealt with by some system of uniform reserve requirements which would be applied equally to all classes of member banks, and to nonmember as well as member banks as a whole.

These problems are not new. They have long been recognized by Federal Reserve authorities and by independent students of banking who have on occasion suggested that identical or uniform reserve requirements might well be applied to all commercial banks in this country. They have also been recognized by State supervisory authorities who have recommended that the States enact reserve requirement legislation which would permit the State authorities to vary the reserve requirements of nonmember banks in a degree consistent with changes made in the reserve requirements of member banks. Some 24 States have now enacted such legislation.[66]

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[66] Table XII attached to the reply to Question F-44 shows the States in which such authority exists, and the reserve requirements prescribed pursuant thereto.

At the present time, about one-half of the banks in the country are not members of the Federal Reserve System, but they are smaller on the average than member banks and hold only 15 percent of the total deposits of the country. Thus, the nonmember reserve requirements affect only a small proportion of total deposits of commercial banks. The effectiveness of reserve requirements does not, however, lie entirely in the aggregate volume of dollars required to be held as reserves. To a very considerable extent it lies in the direct impact of such requirements upon the loan and investment policies of individual banks and the influence that the policies of thousands of banks exert upon the activities of many users of bank credit. The fact that 7,000 nonmember banks are subject to different, and generally less effective, reserve requirements cannot help but be a source of concern to State as well as Federal supervisory authorities.

Another aspect of this situation is the unequal distribution of nonmember banks throughout the country so that in relative importance they vary from approximately 15 percent of all commercial banks in the Federal Reserve District of New York to approximately 70 percent in the Federal Reserve District of Atlanta. Accordingly, the impact of Federal Reserve credit policies and the possibility of rendering Federal Reserve assistance and support to banks generally in time of need vary greatly in different sections of the country. This is an undesirable situation in terms of using credit and monetary policy to promote economic stability.

An interpretation of identical or uniform reserve requirements for both member and nonmember banks, if prescribed by Federal law, as tending to undermine the authority of the State supervisors over nonmember banks would be inappropriate. Actually, such uniform requirements would be analogous to the Federal regulations on consumer, real estate, and stock market credit, which apply to nonmember as well as member banks and other lenders and are administered with the cooperation of State bank supervisors. For reasons of established practice, uniform reserve requirements might even more readily be administered by State banking departments, insofar as nonmember banks are concerned.

Federal Reserve authorities were most immediately concerned over the existing reserve requirement situation in the postwar years when the exercise of general credit policy to restrain inflation was inhibited by the support policy with respect to Government securities. To restrain inflationary pressures under these circumstances, general credit policy tended to pay greater attention to the potentialities of increases in reserve requirements, which immediately raised the question of the effect such increases might have in inducing member banks to leave the System. On occasions, reserve requirement action was deferred for this reason. More recently, since reliance upon open market operations in combination with other instruments of credit restraint has increased, the reserve requirement problem has become less urgent. The present program of credit restraint does not raise so acutely the issues of competitive advantage as between member and nonmember banks.

Nonmember bank reserve requirements are competitively disadvantageous to member banks for two reasons, first, because of lower percentage reserve requirements prescribed in some States, and, second, because of differences in the composition of reserves.[67] Member banks are required to hold their reserves against deposits as balances with Federal Reserve Banks; their vault cash and balances with correspondents do not count as part of the required reserve. Nonmember banks, on the other hand, may hold their reserves in the form of vault cash, balances due from other commercial banks (which yield some indirect return), and in some States certain amounts of securities of the United States, States, or other political subdivisions.

Only the vault cash of nonmember banks is a fully effective reserve in a monetary and credit sense, i. e., in limiting the availability of money and credit. It absorbs basic reserve funds, which are obtained directly or indirectly from the Federal Reserve, dollar for dollar. Vault cash, however, is a required component of reserves in only 11 States, and therefore constitutes only a very small portion of the required reserves of nonmember banks.

The reserves of nonmember banks consist largely of deposit balances with correspondent banks. Such balances do not restrict credit and monetary expansion except to the small extent that the correspondent banks hold reserves against these deposits in the form of vault cash or of balances at the Federal Reserve Banks. For the most part such nonmember bank reserve balances are available for lending by their correspondent banks and thus may contribute to the process of multiple credit expansion on the basis of a given amount of basic reserves.

Reserves consisting of securities, permitted in some States, are not as effective in a monetary and credit sense as reserves with Federal Reserve Banks or vault cash, because they are not immobilized assets but rather are assets which reflect credit expansion. A reserve requirement in the form of specified securities, e.g., United States Government securities, is, however, a limitation on the proportion of bank funds which can be invested in private loans and other types of securities but not on an expansion of total credit or the money supply.

Some changes might well be made in member bank reserve requirements in the direction of incorporating some features of nonmember bank requirements. For one thing, vault cash should be counted as part of member bank reserves, as it is in the case of all State nonmember banks.[68] Also, a uniform "reserve credit" might well be allowed for balances on deposit with correspondent banks, equal to the percentage of reserves required to be maintained by the correspondent against interbank deposits.

46. Discuss the advantages and disadvantages of basing reserve requirements on types of deposits irrespective of the geographical location of banks.

Basing reserve requirements on types of deposits irrespective of geographical location of banks (1) would reduce the inequities in the present system of distributing required reserves among banks,

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[67] Reserve requirements of nonmember banks were discussed in part of the reply to F-44. The tables included with that reply summarize State by State the present percentages and composition of required reserves and the existing powers of State banking authorities to change reserve requirements. State member banks, which hold about two-thirds of the total deposits of all State commercial banks, have for many years been exempted by State law, regulation, or administrative practice from observing State reserve requirements provided they observe the Federal requirements.

[68] Nonmember banks in the District of Columbia, like member banks, may not count vault cash as part of their required reserves.

(2) would eliminate the effects under present reserve requirements of shifts of deposits between banks, and (3) would ease the task of administering the statutory reserve requirement mechanism. It would, however, entail some transitional problems.

A plan for basing reserve requirements on deposits was presented to the Joint Committee on the Economic Report in April 1948 by a staff group of Federal Reserve Bank and Board economists. A main feature of this plan was the provision for different requirements against three easily identified types of deposits—time, demand, and interbank. The plan called for higher reserve requirements against demand deposits than against time deposits, and for higher requirements against interbank demand deposits than against other demand deposits. Aggregate reserve requirements, at least at the outset, would approximate those under present law. The plan was consistent with the basic philosophy which led to the establishment of the present system of required reserves.

Inequities in the present system of setting required reserves.—Under existing law, member banks are classified into three categories—central reserve city banks, reserve city banks, and so-called country banks—for purposes of reserve requirements. Minimum and maximum reserve requirements against demand deposits at central reserve city banks are higher than at banks in reserve cities, where in turn they are higher than at country banks. These provisions are carry-overs from the National Bank Act and from the kind of banking organization which existed prior to the Federal Reserve System. The intent of the graduated scale of reserve requirements was to require higher reserves at those banks, namely, central reserve and reserve city banks, which are authorized to hold the reserves of other banks.

With the tremendous growth in use of banking facilities for all types of day-to-day financial transactions, an increasing proportion of deposits of many of the banks located in central reserve and reserve cities has come to represent the accounts of individuals and businesses rather than interbank deposits. On the other hand, some country banks have cultivated a substantial interbank account business; interbank deposits at these country banks account for a larger proportion of their total deposits than do such deposits at some reserve city banks. The location of banks in or outside central reserve and reserve cities, in other words, is no longer indicative of the type of deposits held. Hence, it is impossible by applying reserve percentages on the basis of an arbitrary classification of cities to approximate reserve requirements in accordance with the type of deposit held.

Effects of shifts of deposits between banks.—Under existing reserve arrangements shifts in demand deposits between central reserve city, reserve city, and country banks add to or subtract from available reserves of the banking system. This results from the differences in reserve requirements on demand deposits. Because of these differences, also, a country bank has a reserve credit for deposit balances due from its correspondent city bank which is less than the reserve required to be carried by the city bank against such deposit balances. Under a system of geographically uniform reserve requirements, shifts in deposits between banks would have no effect on available bank reserves.

The administrative problem.—The Board of Governors is charged with the responsibility for designating the reserve classification of individual cities. The only choice before the Board is to classify a given city as a central reserve city, reserve city, or nonreserve city, even though, as is often the case, some banks in the city hold substantial amounts of interbank deposits and others in the same city do not. If it classifies as a central reserve city or a reserve city, it penalizes the banks with little or no interbank deposits relative to banks doing a similar business elsewhere. If it classifies as a nonreserve city, it favors banks in this city with interbank deposits relative to reserve city banks with such deposits. The administrative problems that have arisen from the requirement to designate the reserve classification of individual cities, though relatively unimportant in their effect on general credit and monetary conditions, have been particularly troublesome.

The inequities associated with the geographical aspects of the present system have been mitigated somewhat by the authority granted to the Board to change the reserve classification of outlying banks in central reserve and reserve cities. All inequities, however, cannot be eliminated in this fashion, because the statutory authority limits these reclassifications to so-called outlying banks; the character of deposits—the business which banks engage in—is a secondary nonstatutory consideration.

Disadvantages of basing reserve requirements on types of deposits.—Proposals for a system of geographically uniform reserve requirements, by type of deposits, have contemplated that the reserve percentages prescribed initially for time deposits, interbank deposits, and other demand deposits would be such as to result in approximately the same aggregate required reserves (of all member banks as a whole) as required under present law. Like any new system of reserve requirements, however, the uniform reserve plan would result in some transitional difficulties for the Federal Reserve System as well as for individual banks. The extent of these difficulties would be greatly influenced by the reserve requirement percentages chosen for the various types of deposits and the over-all level of economic activity when the plan was introduced; such difficulties would be less if the plan were introduced when conditions called for monetary ease. Similarly, the transition problem could be eased for banks that have a relatively large proportion of interbank deposits, by setting a maximum percentage limit of required reserves based on total demand deposits including interbank deposits.

Some students of the problem have contended that there should be no reserve requirement differential between types of deposits. On the other hand, there are others who would favor a much more detailed classification of deposits for reserve requirement purposes based on such factors as turnover and size of deposits and economic activity of depositor. One practical objection to treating all deposits alike is that the impact of launching such a system would be such as to cause serious dislocation in the banking system. The principal objection to an elaborate classification of deposits for the purpose of reserve requirements is that it would be extremely difficult to devise a comprehensive system of classification that would be administratively feasible.

An alternative proposal.—A more modest alternative to the uniform reserve proposal, which might be explored, would be to amend Section

19 of the Federal Reserve Act (1) by eliminating the present requirement that, to be eligible for permission to carry reduced reserves, a central reserve or reserve city bank must be located in an outlying district, and (2) authorizing the Federal Reserve Board of Governors to permit any bank in a reserve city or central reserve city to carry lower reserves, by means of a general formula or otherwise, where the nature of the bank's business justifies it (such as a relatively insignificant volume of deposits due to other banks). This change would make it possible to accomplish some of the major objectives of the uniform reserve proposal, by eliminating or reducing some of the inequities and administrative problems; in effect it would permit the designation of individual central reserve and reserve city *banks*, rather than central reserve and reserve *cities* as at present.

47. Discuss and evaluate the advantages and disadvantages of requiring additional reserves which might be held in whole or in part in the form of Government securities. Illustrate with a specific plan or plans.

A supplementary reserve requirement which banks could meet, in whole or in part, with holdings of United States Government securities might be designed to serve one of two principal objectives:

(1) To influence bank holdings of Government securities by—

(*a*) Restraining banks from selling one class of Government securities in order to buy another type, or

(*b*) Requiring banks to increase their holdings of one or more types of Government securities.

(2) To help limit the capacity of the banking system to expand credit to private borrowers.

These objectives are not unrelated. A securities-reserve plan designed to achieve the first of these two objectives, for instance, might at the same time have the purpose of aiding in the accomplishment of the second as well. In both cases, an important characteristic of a securities-reserve plan would be that it would not impair bank earnings to the same extent as would an increase in primary reserve requirements which might be used to achieve some of the same ends.

Use of a supplementary securities-reserve plan to affect bank holdings of Government securities.—One type of securities-reserve plan relates to a situation in which the yield on short-term Government securities is much lower than the yield on long-term securities, and in which this relationship is being maintained by a debt-management and market-support policy which removes the normal risk of price declines for both classes of issues.

Under these circumstances, banks might tend to sell short-term Government securities and to acquire other, higher yielding assets. They might buy, for example, longer-term Government securities from the nonbank public. In any event, they would presumably sell their short-term securities largely to the Reserve System, which would have to buy them in order to prevent or limit an increase in the yields (i.e., a decline in the prices) of such securities. Acquisition of additional assets by the banks and the purchase of short-term securities by the Federal Reserve would tend to promote an expansion of the money supply, not only because there would be some monetization of debt formerly held by nonbank investors, but also because the purchase of securities by the Federal Reserve would supply the banks with additional primary reserves which would enable them to expand their loans to private borrowers. Under our system of fractional primary reserve requirements, the potential increase in loan and investment assets would be a multiple of the increase in the primary reserves of the banks.

It was in circumstances similar to these that a plan which would raise bank reserve requirements but would permit all or part of the increase to be held in short-term Government securities, the so-called Special Reserve Plan, was proposed in general terms by the Federal Reserve Board in 1946 and submitted in specific form to Congress in the late fall of 1947. The plan would have required that banks hold, in addition to their regular reserves, a special reserve consisting of Treasury bills, certificates, short-term notes, and excess cash assets. The plan was proposed to facilitate banking readjustment from war finance and also to assist in maintaining a stable as well as orderly market for Government securities during the postwar transition period. The unprecedented size of war-accumulated public debt, the large holdings of short-term Government securities by banks, the wide spread between short-term and long-term rates that had been maintained by Federal Reserve action during the war period, and the complex problems of financial management which those facts presented were a source of major concern to both Federal Reserve and Treasury officials. The basic stability of the ownership of the war-created Government debt had not yet been fully tested, and indeed was being threatened by a broad movement to sell short-term securities. Furthermore, the budget was in balance, Federal Reserve held public debt was being retired, and the proposed plan did not contemplate requiring banks to help finance a Government deficit.

In these circumstances, it was felt by the Federal Reserve authorities that a supplementary securities-reserve plan of the sort proposed at the time would help the Federal Reserve System to hold back inflationary shifts in the large bank-held portion of Government securities, to restrain monetization of such securities generally, and to provide time for refinancing maturing Government security issues in a manner that would result in a better balanced distribution of maturities. It was also believed at that early postwar stage that the suggested plan would assist the Federal Reserve in carrying out its traditional responsibilities in the field of credit and monetary management without undue conflict with its then prevailing policy of support for the Government securities market.

The effectiveness of such a plan in limiting over-all credit expansion by the banking system would depend on how far the supplementary reserve requirement impinged on the working liquidity positions of banks. This, in turn, would depend on the amount of reserve-eligible Government securities that the banks held in excess of those immobilized by the supplementary reserve requirement, on the extent of the statutory authority to impose still higher supplementary reserve requirements, on the desire of banks to retain additional securities as a protection against future higher requirements and for general liquidity purposes, and on the amount of additional primary reserves being otherwise supplied to the banking system. For continuing effectiveness of the plan, it would have been essential that debt management policy be geared to hold down the outstanding volume of reserve-eligible securities. A necessary implicit assumption of the special reserve proposal of 1947 was that maturing Government bonds as a general matter would not be refunded into short-term issues eligible for reserve purposes.

The plan as it was proposed would not have met the problem of restraint in a period such as prevailed after the outbreak of the Korean conflict. In that period the demand for credit by business was abnormally strong. Moreover, both banks and other institutional lenders generally were willing to incur large reductions in liquidity by selling Government securities in order to get the higher yields obtainable on loans and to be in a position to satisfy the heavy credit and capital demands. The Reserve System was buying such securities at prices that involved little or no penalty to the sellers, whether bank or nonbank, and was thereby making large amounts of additional reserves available to the banking system, thus facilitating inflationary credit and monetary expansion.

Thus, if the Federal Reserve were undertaking to prevent changes in the yields of Government securities, and if banks as a group held substantial amounts of securities in excess of those needed to meet the supplementary reserve requirement, many banks could obtain additional reserves by selling some of their excess holdings. As far as reserve-eligible securities are concerned, their yields might not show any tendency to increase, but the Federal Reserve would have to buy large amounts of other securities if it wished to prevent or limit a rise in their yields. If the Federal Reserve continued to hold down the yields on longer-term securities, its purchases of such securities might make available to the banks sufficient additional reserves to permit a substantial expansion of bank credit to private borrowers. Accordingly, to be fully effective, a supplementary securities-reserve plan of the sort under discussion would require that the Federal Reserve not make its credit available at the call of holders of Government obligations.

A reserve plan which discriminated in favor of short-term Government securities might encourage excessive reliance by the Government on financing or refinancing through sale of low-yield, short-term securities to the banking system, particularly in periods of Government deficits. The sale to banks of an increasing volume of short-term issues at the expense of sales of longer-term securities to nonbank investors would have serious inflationary repercussions and would tend to defeat the plan as an instrument for restraining over-all credit and monetary expansion.

Under present circumstances, a plan requiring banks to hold a supplementary reserve in short-term Government securities would pose difficult equity problems if it were set up on a basis sufficiently severe to be generally restrictive. This is true because of the considerable differences among banks with respect to the size of their holdings of short-term Government securities in relation to their deposit liabilities. These differences have increased since the end of the war. Requirement of a supplementary securities reserve would force some banks to sell part of their longer-term Government security holdings, to rediscount with the Reserve Banks, or to reduce loans in order to acquire reserve-eligible short-term securities, but would leave other banks with ample liquidity with which to continue expanding credit.

Use of a broad securities-reserve plan to help limit expansion of bank credit to private borrowers.—Another possible type of securities-reserve plan would establish a supplementary reserve requirement to be held in the form of any bank-eligible Government securities, regardless of maturity, or in the form of balances with the Federal Reserve, at the option of the individual bank. A supplemental reserve plan of this type would have as its objective the tying up of all, or at least a substantial part, of the Government security holdings of commercial banks, thus precluding their sale on the market and the expansion of loans on the basis of the proceeds. To accomplish this, the statutory authority for the requirement would necessarily have to be very broad, because bank holdings of Government securities are large in relation to their total deposits. If nearly all of the securities held by banks could not be covered by use of the statutory authority to raise the supplemental requirement, banks would still have securities which they could sell in order to obtain funds to expand their loans, and the plan would lose some of its restricting influence.

Under such a plan, however, the total volume of reserve-eligible securities in existence would be very substantial. There would be very large holdings of such securities in the hands of the nonbank public, as well as in the hands of the banks. As long as banks could buy additional securities eligible for meeting the special requirement, either from nonbank sources or directly from the Treasury, the plan could not effectively limit multiple deposit expansion on the basis of any additional primary reserves the banking system might obtain.[69] In fact, unless the supply of reserve-eligible securities were limited, any additional primary reserves obtained by the banking system would have the same potential for a multiple credit and deposit expansion as if the supplementary security-reserve requirement were not imposed. The only difference would be that part of the credit expansion would have to be in the form of reserve-eligible Government securities instead of loans. To the extent that banks already held ample amounts of reserve-eligible Government securities, however, the full expansion could occur in private credit alone.

If the Federal Reserve were to sell reserve, eligible Government securities to bank and nonbank investors whenever the primary reserves of the banks increased, the primary reserves could be withdrawn from the banking system. To the extent that the banks bought the securities, they would merely be exchanging a form of reserves which earned no interest for a form which would earn interest. In this case, the supplementary reserve requirement would be as restrictive as an increase in primary reserve requirements of the same amount as the supplementary requirement. The only difference would be the effect on the earnings position of the banks.

The magnitude of the potential credit and monetary expansion, therefore, would depend in part on the size of the existing holdings of Government securities of the banking system, on the strength of private demand for credit at the time, and on the freedom of the Federal Reserve to engage in open market sales of Government securities. It would also depend on the extent to which Government securities were

[69] Primary reserves obtained, for example, as a result of a gold inflow from abroad, a return of currency from circulation, or from Federal Reserve open market purchases to maintain orderly conditions in the Government securities market or to facilitate Treasury financing.

being offered on the market by nonbank investors or by the Treasury.

Because of the great variations which have come to exist among banks with respect to the ratio of their Government securities to their deposit liabilities, a supplementary reserve requirement which could be satisfied by holdings of Government securities regardless of their maturity would encounter serious equity difficulties if it were sufficiently large to be generally restrictive. With a supplementary reserve plan which covered only short-term securities, banks whose holdings of such securities were insufficient to meet the supplementary reserve requirement could make the transition by shifting from long- to short-term issues, perhaps assisted by Federal Reserve portfolio adjustments in the opposite direction. On the other hand, if all Government securities were eligible for inclusion as reserves, the requirement would of course have to be much higher in order to be effective. Those banks not having an adequate amount of reserve-eligible assets at the time the plan went into effect could make the adjustment only by borrowing from the Federal Reserve, or by contracting their loans or holdings of corporate and municipal securities, and using the proceeds to buy reserve-eligible securities from the nonbank public or the Treasury. If the adjustments were made by reducing holdings of securities other than United States Government issues, or ultimately contracting loans, the effects on credit conditions in some communities during the transition period migh tbe unduly severe.

Conclusion.—Generally speaking, the effectiveness of a supplementary securities-reserve requirement would depend upon its impact on bank liquidity positions and on the desire of banks to hold more Government securities than they are required to hold. In a period when a large volume of Government securities is outstanding, an effective securities-reserve requirement would appear to require fulfillment of the following conditions:

(1) The permissible supplementary reserve percentages would need to be large enough so that banks would not have any substantial margin of Government securities which they would feel free to liquidate in order to expand credit to private borrowers.

(2) The distribution of holdings of Government securities as between banks would have to be such that equity difficulties arising from an effective supplementary reserve ratio would not be serious. For example, the present distribution of holdings of Government securities among banks is such that, if the first condition above were met, the adjustment difficulties would present a problem for many banks.

(3) The availability of both primary reserves and reserve-eligible securities would have to be limited and kept limited throughout the period that the supplementary reserve requirement authority remained in effect. Federal Reserve Bank credit could, therefore, not be made available at the option of holders of Government securities. This means that interest rates would need to vary in response to market conditions of supply and demand, and could not be held to a fixed pattern by Federal Reserve operations; otherwise a supplementary securities-reserve requirement would have little special value in combating inflationary forces. This condition is essential to the effective operation of any system of reserve requirements, of course, and is not applicable merely to supplementary securities-reserve plans.

In summary, it may be said that a supplementary securities-reserve requirement to immobilize part of bank holdings of Government securities and also to limit the capacity of the banking system to expand credit to private borrowers could be effective only under certain well-defined conditions.

48. Discuss the advantages and disadvantages of requiring during the national defense emergency a supplementary reserve to be maintained against *increases* in either loans and investments or deposits.

Following the outbreak of the Korean conflict, there arose a strong and insistent demand for bank credit by private borrowers. It seemed quite likely that this demand would persist under defense emergency conditions and would have harmful inflationary repercussions on both the civilian and the defense sectors of the economy. To cope with this situation, various proposals have been advanced for supplementing existing instruments of credit policy by an additional reserve requirement for banks. One of these proposals would require banks to hold supplementary reserves against increases in their loans. Another proposal would require banks to hold supplementary reserves against increases in deposits.

Illustration of plans.—A plan which would establish supplementary reserve requirements against increases in bank credit to private borrowers might be developed along the following lines. "Loan assets" would be defined to include all loans and investments other than United States Government securities. For each bank, a base amount of "loan assets" would be established, based on the volume of such assets held in some period immediately preceding the introduction of the plan. The Federal Reserve would be authorized to require banks whose "loan assets" rose above their specified base amounts to hold, in addition to the reserves required under present authority, a supplementary reserve equal to some percentage of the increase in their "loan assets". As long as a bank did not expand its loans above its base amount, its reserve requirement would not be affected by the plan. When any bank increased its loans beyond its base, the plan would come into operation for that bank.

The mechanical operation of such a plan can be illustrated as follows: If a bank were to increase its loans by $1,000, an equal amount of deposits would be created in the process. Required reserves under the present system would increase by $200, assuming that the additional deposits took the form of demand accounts and that the reserve requirement against such deposits was 20 percent. In addition, the reserve requirements of the bank making the loan would increase by a given percentage of the $1,000 increase in its loans. Thus, if the supplementary reserve requirement against loan increases were, for example, 20 percent, then the required reserves of the lending bank would increase by an additional $200. This supplementary reserve would have to be maintained even after the deposit arising from the loan had been drawn out of the lending bank and as long as the bank's total loan assets remained at the higher level. As the deposits shifted to banks other than the lending bank, these banks would be subject to the normal primary reserve requirements on their increased deposits but would not be subject to the supplementary reserve requirement unless they increased their loans.

A plan relating requirements for supplementary reserves to increases in deposits could be developed along the following lines. For each bank there would be established a deposit "ceiling", based presumably on the amount of deposits held in some recent period. As long as the deposits of a bank did not exceed this amount, the bank would not be required to hold supplemental reserves. The plan would become operative for a bank whenever its deposits rose above the base amount, and it would be required to hold a supplemental reserve against that excess as long as it existed.

Reserve requirements under such a plan would operate about as follows. If demand deposits expanded by $1,000, required reserves under existing requirements would have to increase by approximately $200. If a supplemental requirement of, for example, 20 percent of the increase in deposits were to be imposed, then banks would have to hold an additional $200 as required reserves, making a total increase of about $400 in the required reserves of the banking system. As the deposits shifted from the bank that originally experienced the deposit increase to other banks, these banks would be subject to supplementary reserve requirements in addition to the normal primary reserve requirements on their increased deposits.

While these two reserve plans could produce substantially the same result in limiting the potential expansion of credit by the banking system as a whole, there would be a significant difference in the incidence of the supplementary reserve requirements on individual banks. Under the deposit-increase plan, the incidence of the supplementary reserve requirements would fall on the banks receiving the increased deposits. Under the loan-increase plan, the incidence would be on the bank extending the loan.

Advantages and disadvantages.—In general, proposals for supplemental reserves, based on increases in either loans or deposits, have special relevance only for a temporary emergency situation when, for a relatively brief span of time, existing central banking instruments are expected to be inadequate for coping with inflationary pressures. Supplemental requirements of this kind, with careful pre-application planning, could conceivably be set up without transitional readjustments that would work undue hardships on individual banks or that would be unduly upsetting in their initial impact on the credit markets and on financial institutions generally. Actions taken under such plans would be applicable only against margins—that is, only against the increases in activity which were to be curbed. For this reason the reserves required under the plan could be comparatively stringent, and thus exert an especially restraining influence.

A reserve plan based on increases in loans would restrain banks from extending additional credit to private borrowers but would not restrict bank purchases of Government securities. In this way, the market for Government securities would tend to be insulated somewhat from the restriction on bank credit expansion to private borrowers and from the resultant increase in interest rates on such credit. Secondary shifts by bank and nonbank lenders between Government securities and other credits would moderate this tendency somewhat, but probably a widening of the spread between the interest yields on Government credit and private credit would occur. At some point, however, loans to private borrowers might become so attractive that banks would have an incentive to shift out of Government securities notwithstanding the supplemental reserve requirement. Once the spread between the interest rates obtainable on private credit and the yields available on Government securities had reached this point, there would be a tendency for the yields on Government securities to rise in step with any further increase in interest rates on credit to private borrowers.

A supplementary reserve against increases in deposits would limit the ability of commercial banks to expand credit to all borrowers, private and Government. If the plan were set up so as to require a 100 percent reserve against deposit increases, commercial banks as a group would be prevented from expanding their credits and deposits on a multiple basis whenever they acquired additional reserves. The only deposit expansion that could occur would directly reflect such factors as an inflow of gold or an expansion of Reserve Bank credit. Banks could expand their credits to private borrowers only to the extent that they sold Government securities to, or borrowed from, the Federal Reserve. Under this plan, the reduced availability of credit, at a time when the demand for credit was great, would tend to raise all interest rates. Yields on Government securities could probably be kept from rising only by Federal Reserve or Treasury buying, which would make it possible for banks to sell Government securities without loss and to expand their loans. Since banks now hold a very large volume of Government securities, such shifts could be substantial and would greatly weaken the plan's effectiveness in restricting the expansion of credit to private borrowers.

Plans such as these have the limitation that they are designed for temporary application to meet a passing emergency. The longer their use, the greater would be the problems associated with their continuance. By their nature, the plans would tend to perpetuate the patterns prevailing during the so-called base period. Differentials in growth among individual banks and among entire areas or sections of the country would widen over time; the longer such supplemental reserve plans were in effect, the greater would be the inequities and the maldistribution of financial resources they would create.

For these reasons, if the emergency was of more than brief duration, retention of a supplementary reserve requirement would become increasingly onerous. If it were substantially relaxed or removed, however, the resulting additions to the credit potential of the banking system would generate inflationary pressures, perhaps of a serious nature. In order to minimize cases of gross inequity, some corrections in the base allotments could conceivably be introduced by formula or by administrative action, but it would be difficult to devise a method which would be reasonably equitable, would not force some disruptive readjustments, and yet at the same time would not excessively relax the very restraints which the measures were devised to exert.

49. Discuss and evaluate the advantages and disadvantages generally of maintaining bank reserves against classes of *assets* rather than against classes of liabilities as at present.

The idea of relating bank reserve requirements to various classes of assets, instead of to classes of deposits, is one which has never been applied in this or any other country.[70] Accordingly, an answer to this question must be tentative and exploratory. The present reply discusses asset-reserve requirements, first, as a method of selective regulation of bank credit and, second, as a means of restraining expansion in the total volume of bank credit. A final section considers some of the problems of an administrative nature that would present themselves if assets were to be used as the base for fixing required reserves.

Use of an asset-reserve approach for selective credit regulation.—By applying reserve requirements on a selective basis to the assets which give rise to bank deposits (i. e., loans and investments), rather than to deposits themselves, it would appear possible to exercise some regulative influence over the use of credit for specific purposes. Such selective regulation cannot be accomplished by a system which establishes reserve requirements against deposits. By establishing high requirements for some types of loans and investments and low requirements for others, banks could be given an incentive to make loans and investments of the types subject to low reserve requirements, at the expense of other types of credit.

For example, if reserve ratios were set at 10 percent for Government securities and 50 percent for loans, an individual bank could add only $733 to its loans by liquidating $1,000 in Government securities.[71] This would give the individual bank a greater incentive to retain Government securities than it has at present. Or, if a bank had excess reserves of $1,000, it could make loans of only $667 as compared with an investment in Government securities of $909.[72] The same numerical examples would apply if the distinction in reserve requirements were made between various kinds of loans, rather than between loans and Government securities.

From the standpoint of the individual banker, the principal effect of a selective asset-reserve plan would be to alter the relationships between the potential earning power of funds used to make various kinds of loans and investments. If banks could raise the interest charges on types of credit subject to high reserve requirements, however, because of strongly expanding credit demand, and provided that the banks had, or could obtain, excess reserves, they could offset the intended selective restrictive effects to the extent that their borrowers would be willing to pay sufficiently higher rates of interest on such types of credit. Thus, if loan demand were vigorous, the plan might not prevent banks from granting more credit of the types subject to high reserve requirements, but in that event a given amount of reserves would not go as far in meeting *total* demand for credit. The plan would be effective in restraining total credit expansion because the process of acquiring assets subject to high reserve requirements, at the expense of assets subject to low requirements, would result in an increase in the *average level* of reserve requirements, with a con-

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[70] Australia has a reserve requirement which relates required reserves of banks to *increases* in *total* assets including reserve assets. As is pointed out in the reply to Question G-52, however, the Australian requirement, in its actual operation, is similar to a requirement against increases in deposits.

[71] A bank liquidating $1,000 of Government securities would add $1,100 to its excess reserves ($1,000 proceeds from the sale of the securities plus the $100 of required reserves formerly held against these securities). With these excess reserves, the bank could make loans of $733, against which it would have to hold reserves of 50 percent, or $367, thereby using up the entire $1,100.

[72] Loans of $667 plus the addition to required reserves of 50 percent ($333) = $1,000. Investment in Government securities of $909 plus addition to required reserves of 10 percent ($91) = $1,000.

sequent reduction in the expansion potential of the banking system. With a selective asset-reserve plan, therefore, the total volume of credit could be affected by applying pressure, in the form of high reserve requirements, at certain sensitive points which might otherwise be major sources of inflation.

Because of the competition of nonbank lenders, and because banker-borrower relationships may operate in some conditions as a drag on upward changes in interest rates, even when demand for credit is strong, it is possible that interest rates on the types of loans subject to a relatively high reserve requirement would, in fact, not rise rapidly enough or high enough to offset any substantial differences in reserve requirements against various classes of bank assets. To a considerable extent, bankers might react by reducing outstanding credit lines and by choosing their borrowers more carefully; in other words, they might make the selective asset-reserve requirement effective by tightening the availability of the particular type of credit without any significant increase in its cost.

Nevertheless, there would tend to be some rise in interest rates, especially if the demand for the types of credit subject to high reserve requirements were very strong. To the extent that such a rise in interest rates occurred, the effectiveness of an asset-reserve plan in restricting the growth of credit on a selective basis would be reduced. The rise in interest rates, however, would have some effect in dampening the demand for credit. Nevertheless, the success of a selective asset-reserve plan in restricting credit, as in the case of the traditional instruments of credit restraint, would probably result more from the effect on the over-all *capacity*, and therefore the willingness, of banks to lend, than on the *demand* for credit by borrowers.

It has already been noted that a selective asset-reserve plan might not deter banks from expanding types of credit subject to high reserve requirements if credit demand raises the yields on such assets high enough, but that such an expansion would reduce the ability of the banking system to increase the total volume of credit. On the other hand, it should also be pointed out that if a selective asset-reserve plan induced banks to make a major shift from types of credit subject to high reserve requirements to types subject to low requirements, the potential *total* expansion of credit by the banking system would be increased. If banks actually expanded credit in such a direction to the limit imposed by the reserve requirements and the availability of reserves, the resultant increase in money supply might have inflationary repercussions of a different sort but as undesirable as those which the plan was designed to prevent. It should be noted that the risks of such a situation developing might be very great in circumstances in which there were large holdings of Government securities in the hands of nonbank investors, and in which the disposition to retain them was not strong. Such risks would also be serious in a period of large and sustained Government deficits in which the supply of Government securities suitable for bank investment was being increased rapidly.

The uncertainty as to how banks would modify their lending policies under a selective asset-reserve plan raises a special and fundamental issue with respect to any such plan. Against the background of American banking experience, it can be said that the major purpose of legal reserve requirements is to set a determinable limit to the expansion potential of a given dollar volume of bank reserves. The present system of reserve requirements involves several elements of indeterminateness, but on the basis of experience it is possible to estimate how these will average out.[73] Under a selective asset-reserve plan, however, the expansion multiple of a given volume of bank reserves would be even more indeterminate than at present in the sense that it would depend upon the successive decisions of various independent bank managements as to the class of assets that they would regard as advantageous to acquire.

The more highly selective the reserve plan was made, the more indeterminate would be its results, so far as the total volume of credit is concerned. Thus, as a given volume of additional reserves became available to the banking system and moved from bank to bank, giving additional loan and investment power with each shift, varying decisions would be made with respect to the use of excess reserves, with considerable uncertainty as to what the final expansion potential would be. This result would make it even more difficult than at present for the Federal Reserve to estimate how much Federal Reserve credit it would be desirable to supply in order to facilitate the amount of over-all expansion in bank credit that would be consistent with current economic developments and, contrary-wise, to estimate how much bank reserves would have to be reduced in order to effect a desirable amount of restraint on bank credit expansion.

If an objective of a selective asset-reserve plan were to keep the interest rate on Government securities artificially low, relative to other types of borrowing, a number of problems would be created. For one thing, new issues of such securities would be made less attractive to potential nonbank investors. To overcome this, special bank-restricted securities might have to be offered to such investors to a much greater extent than is presently the case. In effect, two large separate and noncompetitive markets for Government securities might tend to be created. The effectiveness of the plan, therefore, would hinge, to an important extent, on debt management policy. This kind of a situation would raise in critical form the problem of the degree of relationship between credit and monetary policy and debt management policy required by the need for over-all economic stability.

Like other reserve plans, a selective asset-reserve plan would tend to drive borrowers affected adversely by the plan to other lenders, such as insurance companies, or to the private securities market. To the extent that other lenders could accommodate additional demands for credit by liquidating Government securities, the effectiveness of a selective asset-reserve plan would be limited. To the extent that banks bought these securities they would still be financing the restricted types of credit, but would be doing so indirectly rather than directly.

These limitations would be especially serious with respect to certain types of credit at times when nonbank investors held large amounts of Government securities and had no strong incentives to keep their holdings at existing levels. Noncommercial bank investors, especially insurance companies and mutual savings institutions, compete with commercial banks for several important kinds of lending—for mort-

[73] For example, a shift in deposits from central reserve city banks to country banks increases the excess reserves of the banking system as a whole, because country banks are subject to lower reserve requirements.

gage loans, for example. In addition, term loans by banks to corporations, to a considerable extent, compete with term loans or private placements with insurance companies. Thus, the ability of a selective asset-reserve plan to direct the flow of resources into specific types of activity would be considerably weakened by the availability of funds from nonbank lenders and investors.

A selective asset-reserve plan is not to be considered as a substitute for a combination of credit measures, some of which affect the credit decisions of a greater variety of lenders and borrowers—such as open market and discount operations—and some of which affect the credit decisions of lenders and borrowers with respect to special classes of credit—such as regulations of stock market, consumer, and real estate credit. For example, it would be difficult, if not impossible, to prescribe asset-reserve ratios which would discriminate between various classes of installment sale loans for the purpose of having approximately the same effect as the prescribing of different down payments and maturities for such loans. Furthermore, an approach to credit regulation through a structure of reserve requirements based on classes of bank assets is not necessarily simpler than an approach through a combination of supplementary selective credit regulations in fields in which such regulation is practicable. It might, in fact, prove in practice just as complex if not more so.

Use of an asset-reserve plan to regulate the total volume of bank credit.—If asset-reserve requirements were substituted for deposit reserve requirements, one of the main objectives would probably be to provide a means of influencing credit on a selective basis by separating loans and investments into two or more classes and prescribing different reserve ratios for each class. In the final analysis the restrictive effect of the measure would depend upon the total amount of reserves that banks would be required to hold. Because the loans and investments of a bank are commonly smaller than its deposits, it follows as a matter of simple arithmetic that, in order to tie up the same *dollar amount* of reserves, the *ratio* (or average of all ratios) of required reserves to total loans and investments would have to be a larger percentage figure than an equally effective ratio against deposits. Moreover, the higher the reserve requirements, the greater would need to be the difference between the two ratios.[74]

It may be concluded that if an asset-reserve plan were to be used purely as an instrument of quantitative credit regulation, it would have little or no advantage over the present system of relating required reserves to deposits. In order to achieve the same degree of restrictiveness, higher percentage requirements would be necessary than under the present system, and any changes in the prescribed ratios would have to be greater in order to be equally effective. Any special merit of an asset-reserve plan would depend largely on its use on a selective basis.

Additional observations on asset-reserve plans.—The introduction and operation of an asset-reserve plan undoubtedly would pose serious administrative difficulties for the Federal Reserve System and operat-

[74] For example, it would take only a 10 percent reserve requirement against loans and investments (excluding the capital assets of banks) to be as effective as a 9 percent requirement applied against deposits, but it would take a 50 percent ratio against loans and investments to be as restrictive as a 33 percent requirement against deposits. The reason for this is that as the requirements were raised, a requirement related to assets would be applied to a base that would become smaller and smaller in relation to the volume of deposits.

ing problems for the banks, but these problems might not be insuperable if the statutory authority given to the Board of Governors were sufficiently broad.

A transition from the present system of reserve requirements behind demand and time deposits to a uniform requirement against all loans and investments could probably be made without too serious transition problems for the banking system as a whole. An asset-reserve ratio of about 17.4 percent applied to member banks, as of June 30, 1951, would have left these banks as a group with approximately the same over-all amount of excess reserves, and would have compared with the actual deposit-reserve requirement ratio on that date of 15.9 percent. For individual banks whose total earning assets were larger in relation to their deposit liabilities than was true for member banks as a whole, some readjustment would be necessary. The number of such banks and their special operating problems could only be determined by intensive study on a bank-by-bank basis. The readjustments which banks would be compelled to make in shifting to a different base for required reserves would be more complex than those involved when deposit-reserve ratios are increased, but they could be effected in a similar manner through borrowing or through liquidation of Government securities.

Another consideration worth mentioning is that the possible restrictive nature of statutory limitations on the Federal Reserve's authority to alter asset-reserve ratios might defeat the objectives of a selective asset-reserve plan. Statutory powers with respect to a selective asset-reserve requirement might be too narrowly limited in one or both of two ways: (1) the extent of change that might be permitted in a certain ratio could be too small to bring about the desired effect on the availability of credit for a specific purpose; or (2) it might be impossible to raise one or more of the ratios to the upper statutory limit without forcing a contraction in the total volume of credit, because of statutory limitations on the extent to which the remaining ratios might be lowered. Even if the law specified broad limits within which the reserve requirements might be varied with respect to various classes of assets, it would be very difficult to determine the desirable degree of differentials between the various classes of loans and investments at any given time, and what changes to make in them from time to time.

The foregoing discussion indicates that the functioning of an asset-reserve plan would differ in many important respects from the functioning of the present deposit-reserve requirements. Whether applied primarily as a means of regulating credit selectivity, or primarily as a means of influencing the over-all volume of credit and money—i. e., as a substitute for present deposit-reserve requirements, this plan would have various complexities. Accordingly, any such plan would require further study and testing by bankers, university scholars, independent experts and students, and government officials before it could be seriously proposed to replace the existing system of reserve requirements.

50. State the statutory authority for the power, if any, of the Board of Governors, the Federal Reserve Banks, or of any agency of the U. S. Government to control directly or to "ration" the extension of credit by individual banks. Specify the (legal) circumstances under which such rationing could occur and the control of the President over its operation. Under what (economic) circumstances, if any, would you recommend the use of credit rationing? Describe the manner in which you believe that such a system would operate.

There are certain provisions of law which are believed to contain authority in various circumstances and under specified conditions for the control or rationing of the extension of credit by individual banks. Of these the most comprehensive and important are the provisions of Section 5 (b) of the Trading with the Enemy Act and section 4 of the Emergency Banking Act of 1933.

Emergency statutes.—Section 5 (b) of the Trading with the Enemy Act (first enacted in 1917 and amended by the Emergency Banking Act of 1933 and other later statutes, 12 U. S. C. 95a) authorizes the President, through any agency that he may designate—

> during the time of war or during any other period of national emergency declared—

by him to—

> investigate, regulate or prohibit * * * transfers of credit or payments between, by, through or to any banking institution * * *.

Section 4 of the Emergency Banking Act of March 9, 1933 (12 U. S. C. 95) provides that—

> * * * during such emergency period as the President of the United States by proclamation may prescribe, no member bank of the Federal Reserve System shall transact any banking business except to such extent and subject to such regulations, limitations, and restrictions as may be prescribed by the Secretary of the Treasury, with the approval of the President.

The language of the two emergency statutes set out above is broad and comprehensive and is believed to constitute authority for the President to control or ration the extension of credit by individual banks and by other financing institutions in national emergencies. Since these statutes were enacted in emergencies of many years ago and for other purposes, however, their use as the basis for imposing credit controls of this kind is open to considerable question. Accordingly, it would not seem expedient to rely on them in the present or any future national emergency except as a last resort when other restraint measures have proved inadequate, and then only after consultation with the appropriate Congressional committees regarding the proposed action. In fact, it would be preferable to obtain specific Congressional approval.

Legal considerations.—Action under the Emergency Banking Act may be taken only in an emergency period proclaimed by the President, and under the Trading with the Enemy Act only during war or national emergency declared by him. The President declared a national emergency on December 16, 1950, and therefore it would seem that he is now legally in a position to exercise authority under either of these statutes if he should so desire. Under the Trading with the Enemy Act, action may be taken by the President or through an agency designated by him and, under the Emergency Banking Act, action may be taken only with his approval. He, therefore, could exercise such control over operations under these statutes as he might wish.

Economic considerations.—The rationing of the extension of credit by individual banks is an inflexible and potentially inequitable measure and should be used only in most exceptional circumstances. Such rationing of bank credit under these statutes, therefore, should take place only in times of great inflationary pressures when bank credit extended to private borrowers is at an extraordinarily high level and has been rising sharply, when other measures to restrain credit and monetary expansion have been taken and proved inadequate, and when there is reason to believe that credit rationing by banks will substantially aid in checking inflation.

One of the difficulties in imposing mandatory rationing of bank credit in a period of great inflationary pressures would be the widespread diversion of strong demands for private credit to nonbank lending institutions. The effect would probably be an increase in incentives for such nonbank lending institutions to replace their holdings of lower-yielding United States Government securities with higher-yielding private obligations, thus giving rise to selling pressure in the Government securities market, with attendant serious problems for public debt-management policy, especially if there were sizable Federal deficits in prospect. Thus, any mandatory rationing approach to the curbing of bank credit expansion might not only stimulate the activity of nonbank lenders but might also have an adverse effect upon the Government securities market unless the program of direct credit rationing were extended at the same time to apply to nonbank financing institutions. Accordingly, it would be necessary to give consideration to the application of any such program of credit rationing to all important bank and nonbank financing institutions.

It should be noted that rationing of bank credit during any period of national emergency not only would divert demands for private credit to the nonbank lending institutions, but would also undoubtedly give rise to more pressures for extension of credit by the Government in certain areas than the currently used instruments, which are more flexible in their application and more gradual and moderate in their effect. To the extent that such pressures might not be resisted, the effectiveness of a program for rationing private credit, whether through banks or through both banks and nonbank lending institutions, would be impaired or defeated.

Manner of operation.—If occasion should arise when the rationing of extension of credit by individual banks were deemed essential to the Nation's welfare, one method by which it could be put into effect would be through a prohibition or restriction upon any increase in credit extended by a bank above the average volume of its outstanding credit in a given base period in the recent past, or above the ratio during such base period of its outstanding loans to total assets. Some flexibility in the selection of a base period would be desirable in order to take care of those banks which have large seasonal fluctuations in outstanding credit. If the plan were to be in effect for any length of time, additional flexibility would be needed to provide for the expanding credit needs of growing communities and sections of the country. Any such control measure should be applied to all banks or at least to all insured banks, and, as indicated above, it might well be necessary to apply the measure to nonbank financing institutions also.

These controls, which presumably would be placed in operation through the issuance of an executive order by the President under the Trading with the Enemy Act, would need to contain certain exceptions. For example, it would be necessary to permit banks to carry out commitments made prior to the date on which the controls were put into effect. If the controls were adopted during the continuance of the present defense effort, it would be desirable to give some leeway for the extension of credit necessary to the national defense; and also there would be need, at any time, to make some exceptions with respect to essential civilian production. The determination of what is credit necessary for defense or for essential civilian purposes is a difficult matter of judgment and would present a complex administrative and operating problem.[75] An attempt to meet the problem as to defense credit might be made through the issuance of regulations recognizing as defense loans those with respect to which a certification were made by an appropriate Government contracting agency or by prime contractors with the Government. Such procedures could be only partially satisfactory at best, and the many difficulties attendant upon them are not to be minimized. The larger the number of exceptions needed to make the plan practicable and workable, the less effective it would be as an anti-inflationary device. There would be enforcement problems which would be hard to resolve and the avoidance of many serious inequities would be difficult.

Another possible method by which credit control might be attempted under the emergency statutes would be by forbidding all credit extensions except those which conform to certain standards, with the determination as to such conformity in individual cases to be made either by financing institutions on the basis of criteria specified in Government regulations or by some Government agency or official. Obviously loans to defense contractors and loans for defense-supporting purposes would have to be exempted, along with many others. As indicated by the foreign experience with this type of credit control cited in the answer to Question G–52, the practical difficulties involved in any such program would be indeed tremendous, and if individual credits were required in each case to be passed upon by Government agencies or officials, the task would be a well nigh impossible one, aside from its other objectionable features.

Certain miscellaneous statutes.—In addition to the two emergency statutes discussed above, there are certain other regulatory statutes which will be briefly mentioned, although they are not believed to be of the kind contemplated by this question. For example, selective credit regulation is authorized with respect to credit for the purpose of purchasing or carrying registered securities (50 App. U. S. C. 2131–2; 15 U. S. C. 78g), consumer credit, and real estate credit. These regulations are discussed in response to Questions F–39, F–40, and

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[75] It is true, of course, that the present Voluntary Credit Restraint Program makes exceptions for credit extended for defense production and essential civilian needs, but it does not present the administrative difficulties which would arise under any plan for mandatory rationing of credit because, without attempting to define these excepted types of credit, the voluntary program phrases lending standards in broad general terms and relies upon the willingness of lending institutions voluntarily to exercise judgment in the spirit of the program. Under a mandatory plan dependent upon enforcement measures, rigid definitions of credit for essential civilian and defense production would be necessary.

F–41, and it is sufficient here to say that they restrict credit expansion not by rationing but by deterring the use of credit in selected areas.

Another example is found in a group of provisions which were added to the Federal Reserve Act by the Banking Act of 1933. These are the provisions that authorize the Board to fix the percentage of member bank capital and surplus which may be represented by loans secured by stock or bond collateral; that direct the Reserve Banks, in determining whether to grant or refuse credit accommodations to member banks, to give consideration to whether undue use is being made of bank credit for speculative purposes or for any other purpose inconsistent with the maintenance of sound credit conditions; and that authorize the Board in certain circumstances to suspend a member bank from the use of the credit facilities of the Federal Reserve System for such undue use of bank credit or for increasing its loans on securities (F. R. Act, secs. 4, 11 (m), 13; 12 U. S. C. 301, 248 (m), 347). Also ,the Board is authorized to limit or restrict the extension of credit by Federal Reserve Banks (F. R. Act, sec. 13; 12 U. S. C. 361), and, with the approval of the Secretary of the Treasury, to require Federal Reserve Banks to restrict extensions of credit or otherwise to exercise their powers to prevent undue credit expansion. (Act of May 12, 1933, sec. 43; 31 U. S. C. sec. 821.)

G. International Comparisons

51. Discuss and evaluate, as far as your available information permits, the relationship between the Executive, the Treasury, and the Central Bank in foreign countries. Place particular emphasis on the resolution of policy conflicts.[76]

Historical background.—In the nineteenth century and the early decades of the twentieth, it was believed that central banks could best serve the public interest if they operated free from political intervention. For this reason, most central banks were chartered to operate with a high degree of independence from the legislative and executive authorities of the nation. In accordance with the accepted rules of the gold standard, central banks by law or by custom were expected to maintain convertibility of their note and deposit liabilities into gold. In line with another set of traditional precepts, they were expected to confine their domestic asset holdings largely to high-grade short-term commercial paper while their holdings of government securities or direct advances to the Treasury were usually limited by mutual understanding or by law. It was generally believed that domestic and international financial stability as well as the public interest generally would best be promoted by close observance of these principles. It was further believed that the best way to assure such observance on the part of the central bank was to establish it as a specially chartered private institution, free from government control and influence on current operations.

[76] The subject matter of this question, and also of Questions G–52 and G–53, is dealt with in considerable detail on a country-by-country basis in the report "The Treasury-Central Bank Relationship in Foreign Countries—Procedures and Techniques," prepared in 1950 by the staff of the Board of Governors of the Federal Reserve System in response to a request from the Joint Committee on the Economic Report and published as Appendix I to General Credit Control, Debt Management, and Economic Mobilization (materials prepared for the Joint Committee on the Economic Report by the Committee Staff, 82nd Congress, 1st session, 1951). The answers to the present questions take account of some recent developments not covered in the earlier report.

In recent decades the disintegration of the international gold standard, the expansion in economic responsibilities of government, and the growth of public debts have brought about the development of a new position of central banks in the state. In adapting to these changing conditions, public opinion has come to place greater emphasis on the public interest character of central banking functions and this has been increasingly reflected in the basic statutes governing central banks. Also, in a number of countries, socialist parties came into power and were pledged to abolish the private ownership of central banks which they had long opposed as a matter of doctrine. Thus, by original enactment, by amendments to their original charters, or by outright nationalizations, nearly all foreign central banks have been integrated to a greater or lesser degree into the formal governmental structure.

In foreign countries, nevertheless, there is considerable variation in the actual position of central banks within that structure. Some countries have adopted elaborate statutory arrangements to make sure that the central bank is given an opportunity to develop independently its own point of view and to assert that point of view strongly in the highest councils of the government. At the other end of the scale, particularly in countries which succumbed to totalitarian forms of government of one kind or another, the central bank became an agency entirely subordinate to those who wielded supreme political and economic power.

Regardless of formal provisions, the actual position of the central bank vis-à-vis the government has always been greatly affected by the success of credit and monetary policies in dealing with the principal economic problems of the day. During the unprecedented depression of the thirties, for instance, a few central banks opposed "reflationary" policies, and thus laid themselves open to charges of needlessly prolonging the depression. Accusations of this sort against the Bank of France and the Commonwealth Bank of Australia were largely responsible for the decisions to nationalize the former and to make the management of the latter clearly responsible to the government.

In other cases, the limited efficacy of credit policy as compared with fiscal policy in stimulating demand under conditions of exceptionally severe depression and widespread bankruptcy and unemployment led during the thirties to a loss of prestige for the central banking function. As a result, public resistance against a diminution of the independent status of central banks declined during this period.

In the past few years economic conditions radically different from those of the thirties have affected the public standing of central banks in the opposite direction. The aftermath of war finance, huge reconstruction needs, and finally renewed threat of war made for persistent inflationary pressures. These conditions have given rise to a more aggressive use of monetary policy, and in several countries, including Belgium, France, and Italy, such policy achieved notable successes in coping with postwar inflationary pressures even though budgets remained unbalanced. More recently the United Kingdom, the Netherlands, and Denmark, as well as other countries, have reverted to monetary policy instruments in an effort to counteract the inflationary repercussions of the Korean War and of the rearmament program. These experiences have reestablished in the public mind the importance of the central banking function; they have also reemphasized the desirability of the central bank having a special and independent position within the governmental structure.

Importance of tradition, personalities, and informal procedures.—An understanding of this general historical background is indispensable for an explanation of present-day relationships between governments and central banks, as expressed in statutes and as influenced by tradition, personalities, and informal cooperative procedures. The latter factors are often of considerable importance.

In many countries (e. g., the United Kingdom, Belgium, and Italy), irrespective of the statutory arrangements, central banks have a special public standing which derives from prestige acquired over a long period and from their ability to attract qualified personnel. Again, present-day central bank officials, although ordinarily governmental nominees, are often appointed or hold office for relatively long terms. This makes it possible for them to take a strong position for the maintenance of sound credit practice and monetary stability and to maintain a high degree of independence from political pressure.

Depending on the prestige of the central bank and of its policy-making officials, its actual independence and influence on economic policy formation may thus be larger or smaller than is indicated in the legislative provisions relating to its public status and powers.

Besides formal provisions for coordination of fiscal and monetary policies, frequent informal consultations between officials of the Treasury and the central bank are common practice and contribute to a better understanding of common objectives, and hence to the development of complementary rather than conflicting measures.

Statutory arrangements.—There is a wide range of variation in the arrangements that are made in various countries for giving the government in office an opportunity to exercise an influence over central bank credit and monetary policy and for giving the viewpoint of the central bank an adequate hearing, when governmental financial and economic policy is being formulated. Exhibit L (p. 499) to this reply presents a tabular summary of the principal arrangements for countries with a parliamentary system of government.

In countries where the actions and policies of the government as a whole are constantly subject to review and approval by a parliament, responsibility for central bank policies has sometimes been delegated to the minister of finance. In these countries, it should be noted, the minister of finance exercises not only the debt management function, but also holds broad powers of budgetary and economic planning and is in effect the principal economic-policy-making official of the cabinet, which in turn is collectively responsible to the legislature. The minister of finance today holds unqualified power to direct the policy decisions of the central bank only in the United Kingdom.[77] Similar legislation was previously in effect in the Netherlands, Australia, New Zealand, and Japan, but has recently been amended or qualified.

According to the Act nationalizing the Bank of England (1946), the Treasury may give such directions to the Bank of England as are believed to be necessary in the public interest, but such directions must

[77] This is also generally the case of the countries in the Soviet orbit. Because of the basic differences in political and economic structure between these countries and the United States, the experience and institutions of these countries are not dealt with here.

be preceded by full consultation with the central bank, whose officials are expected to hold independent views. In India, similar authority was given to the government as a whole by the Reserve Bank Act of February 1948 which transferred the central bank to public ownership. In Japan the power of the Minister of Finance to give directions to the central bank was qualified by the establishment in 1949 of the Policy Board of the Bank of Japan, which also has wide powers to determine the policies of the Bank. This Board includes as voting members the governor of the Bank and four members appointed by the cabinet with approval of the legislature; though representatives of the Ministry of Finance and of the Economic Stabilization Board sit on the Policy Board, they have no voting powers.

In Belgium the Minister of Finance, represented by a Royal Commissioner, has the right to oppose the execution of any measure which would be contrary to law, or to the interests of the state. On the other hand, the preamble to the law semi-nationalizing the Bank stated that it is essential that the central bank remain distinct from the executive and independent in its actions to the extent consistent with the national interest.

Thus, even where the central bank in its policy-making functions is legally subordinate to the minister of finance, it has a status widely different from that of a bureau or office in the ministry. This fact is also confirmed by the independence which the central banks have in all of these countries—as do central banks elsewhere—with respect to their "housekeeping" functions such as expenditures, and recruitment and remuneration of personnel. When the Bank of England was nationalized in 1946, the determination to leave it in an independent position with respect to these functions was a deliberate and fully-weighed decision.

In France and Italy the position of the central bank in relation to public opinion has been strengthened by the establishment of a national council charged with formulation of monetary and credit policy, which includes among others the minister of finance and the head of the central bank. In France, as in a number of other European countries where the ownership of the central bank has been nationalized or semi-nationalized, there is no statutory provision for the resolution of policy conflicts between the central bank and the ministry of finance. The National Credit Council has advisory functions only. In Italy, however, the Interministerial Committee for Credit and Savings is a policy-making body presided over by the Minister of the Treasury. In both France and Italy, the central bank supplies the technical staff and the secretariat of the coordinating body and plays an important part in the decision-making process.

In other countries the device of a coordinating council has been used to meet the often felt need for enabling the central bank to present its views at an early stage in the formulation of governmental economic policies. A few countries, including the Philippines and Paraguay, have accordingly made the head of the central bank a member of a national economic council having broad responsibilities for coordinating all economic policies and programs of the government.

Specific statutory arrangements are made in a few countries to keep the government currently informed of the deliberations and decisions of the central bank. In this connection, the right to veto certain policy decisions of the central bank is sometimes given to the government. According to the interim law recently adopted by the Federal Republic of Germany, the Bank deutscher Laender shall support the general economic policy of the Federal Government and two representatives of the Government may attend the meetings of the board of directors of the Bank; these representatives have no vote but if, in the opinion of one of them, any decision of the board conflicts with the general economic policy of the Federal Government, the decision must be suspended for a period up to eight days. The issue would then presumably be discussed directly between the Bank board and the Cabinet. In Belgium a Government Commissioner sits on the central bank's board of directors, without vote but with the right of veto, which needs to be sustained by the Minister of Finance to become effective. In practice, however, policy differences are worked out on the basis of close official and personal relationships. In Canada the Deputy Minister of Finance is a member of the board of directors of the central bank but has no right to vote. In Denmark the Minister of Finance and the Minister of Trade must be notified when the central bank wishes to change the discount rate.

A few countries have recently instituted specific machinery for appeals to a higher authority in order to resolve policy differences between the Treasury and the central bank. In the Netherlands, where the Minister of Finance has had since 1945 authority to issue directions to the central bank, the Governing Board of the Bank was given in 1948 the right of appeal to the Crown in case of disagreement. Such an appeal would lead to further careful consideration of the issue by the Government as a whole. In Australia the Commonwealth Bank Act of 1945 had given the Treasurer the power to give directions to the Bank in the event of a difference of opinion. An amendment of July 1951 now provides that, if the Treasurer and the Bank are unable to reach agreement on an issue, the question must be considered by the Government as a whole; the Government's decision must then be laid before the Parliament together with statements by the Government and the Bank. A recent proposal for Iceland made under the auspices of the International Monetary Fund goes a step further in the same direction. The proposal provides that only the Prime Minister acting for the Government as a whole may issue directives to the central bank and, in addition, that before doing so he must obtain a vote of confidence on the question from the Icelandic Parliament.

Two other countries in which the cabinet is responsible to the parliament have gone even further in underlining the special status of the central bank in the governmental structure, by making it responsible directly to parliament rather than to the government of the day. Thus, in New Zealand, where from 1939 to 1950 the Minister of Finance had power to give directives to the Reserve Bank, an amendment of the law in July 1950 ended this power and stipulated instead that "the Bank shall give effect to any resolution of the House of Representatives in relation to the Banks' function or business." In Sweden the Riksbank has long been directly responsible to Parliament and its Banking Committee by virtue of a constitutional provision. Moreover, the Bank Act of 1934 specifically provides that the Riksbank may not receive instructions from anyone but the Riksdag (Parliament) and its Banking Committee.

In countries with constitutions that separate the legislative and executive powers, the minister of finance or secretary of the treasury is often a member of the central bank's board of directors. Historically, the reasons for this kind of relation were two-fold: it was considered a desirable method of protecting the public interest when the note issue power and other special responsibilities were given to a quasi-public or private institution; and it seemed natural that part ownership by the government (where this existed) should be reflected in representation on the board. The need for discretionary credit and monetary policy and the need to coordinate fiscal policy and credit and monetary policy were not well understood and had little to do with the decision to place the minister of finance on the board. In the United States the Secretary of the Treasury was a member of the Federal Reserve Board until 1935. In a number of Latin American countries the minister of finance is at the present time a member of the central bank board. In Argentina and in the Dominican Republic the minister of finance is the chairman of the board; in Colombia he is not chairman but is a member with power to veto certain important policy decisions.

Concluding comment.—The differences in arrangements and procedures from one country to another are the result of efforts, some successful and others less so, to meet special national requirements in each country. At the same time it is recognized in all free countries that the exercise of the central banking function requires special knowledge gained by experience, continuous study, and intellectual independence. For this reason most central banks, while part of the governmental structure, occupy a special position within that structure, and the power to overrule them tends now to be reserved to the government as a whole and is limited to cases of conflict with basic national policies.

Finally, it must be noted that the frequently elaborate statutory provisions relating to the powers of the government to give directives to the central bank or to the resolution of policy conflicts between the bank and the minister of finance have found hardly any practical application. It has indeed been generally recognized that, to be effective, credit and monetary policy must be closely coordinated with the fiscal and other economic policies of the government and that this coordination is best achieved by informal day-to-day contact and consultation among the policy-making officials of the central bank and the economic departments of government, without invoking formal prerogatives.

EXHIBIT L

Tabular summary of principal provisions relating to ownership and governmental control of central banks of countries with parliamentary form of Government [1]

Country	Ownership	Statutory relationship between minister of finance and central bank	Other forms of central bank responsibility to government [2]	Appointments [3] of—		Principal recent changes with respect to previous legislation
				Governor [4]	Directors [5]	
	(1)	(2)	(3)	(4)	(5)	(6)
Australia	Government (1912) [6]	Treasury is represented on Board of Directors.	In case of disagreement between Treasury and Bank, Governor General of Australia (acting with advice of Federal Executive Council) may decide the policy to be followed. The details of the disagreement and of the decision of the Governor General must then be reported to Parliament (1951).	Of 10 directors: 9 (including Governor and Deputy Governor) by Governor General, 1 exofficio from Treasury (1951).		In July 1951 procedure in column (3) replaced system under which Treasurer could give directions to the Bank in cases of disagreement, and policy-making Board of Directors was created.
Belgium	50 percent Government, 50 percent private (1948).	Minister of Finance has right to control operations of Bank and may veto any measure contrary to the law or the interest of the State. This control is vested in Government Commissioner who reports to the Minister of Finance (1939).	None specified.	By King: Governor (1939) and other directors (1948).		Bank seminationalized in 1948. Preamble to this law stresses necessity that central bank remain distinct from executive and independent in its actions to extent consistent with the national interest.
Canada	Government (1938)	Minister of Finance appoints Board of Directors and is represented, without vote, on Board and Executive Committee (1934).	The veto power of the Governor of the Bank over decisions of the Board of Directors is subject to reversal by the Governor General of Canada (1936).	By Board of Directors, with approval of Governor General. Deputy Governor similarly (1934).	By Minister of Finance, with approval of Governor General (1934).	Bank was established in 1935 under legislation of 1934 and nationalized in 1938.
Ceylon	Government (1949)	Minister of Finance, who is represented on Monetary Board, may direct Bank to adopt a policy in accordance with the opinion of the Government as noted under (3) (1949).	In case of disagreement between Minister of Finance and Bank, the Government assumes responsibility for the adoption by the Bank of a policy in accordance with the Government's opinion (1949).	Of 3 members of Monetary Board: 2 (including Governor) by Governor General on recommendation of Prime Minister, 1 ex officio from Treasury. Deputy Governors by Board with concurrence of Minister of Finance (1949).		Established in 1950 under legislation adopted in 1949.

See footnotes at end of table.

EXHIBIT L—Continued

Tabular summary of principal provisions relating to ownership and governmental control of central banks of countries with parliamentary form of Government [1]—Continued

Country	Ownership	Statutory relationship between minister of finance and central bank	Other forms of central bank responsibility to government [2]	Appointments [3] of—		Principal recent changes with respect to previous legislation
				Governor [4]	Directors [5]	
	(1)	(2)	(3)	(4)	(5)	(6)
Denmark	Government (1936)	Bank must inform Minister of Finance (as well as Minister of Trade) before it changes the rediscount rate (1936).	The Minister of Trade as Royal Bank Commissioner is required to insure that the Bank fulfills its obligations under the Bank Act. He presides over meetings of the Board of Directors. Decisions of a far-reaching character cannot be taken by Committee of Directors unless he is present or has been informed in advance (1936).	By King. Two other members of Board of Governors by Board of Directors (1936).	Of 25 directors: 8 by and from Parliament, 2 by Minister of Trade, 15 (in rotation) by existing Board of Directors (1936).	Nationalized in 1936.
France	Government (1945)	Minister of Finance is represented by 2 "censors" without vote at the weekly meetings of the General Council of the Bank which supervises current operations (1946).	All economic departments of the Government are represented on the National Credit Council, a broad advisory body on problems of credit control. The Minister of Finance is president of the Council, but rarely attends its meetings. The Governor of the Bank of France is vice president ex officio (1945).	By President of Republic. Two Deputy Governors similarly (1945).	Of 12 members of General Council other than Governor, 2 Deputy Governors and 2 Censors: 7 by Minister of Finance,[7] 4 ex officio from public credit institutions, 1 by staff of Bank (1945).	Bank nationalized and National Credit Council established in 1945.
Germany	Land Central Banks, which are temporarily owned by Land (State) Governments (1948).	Minister of Finance has a representative, as does the Minister of Economy, in meetings of Board of Directors; these representatives have no vote, but may submit proposals and may require suspension of a decision for 8 days (1951).	The Bank is obliged to give consideration to the general economic policy of the Government and to support such policy within the framework of central bank functions (1951).	By Board of Directors. Other members of Board of Managers similarly (1948).	Directors are the Presidents of Land Central Banks, plus a Chairman elected by them, plus President of Board of Managers (see column 4) (1948).	Interim Law of 1951 replaced Military Government law of 1948 which made Bank responsible to Allied Banking Commission.

India	Government (1948)	None specified	The Central Government may from time to time give such directions to the Bank as it may, after consultation with the Governor of the Bank, consider necessary in the public interest (1948).	13 directors (including Governor and 2 Deputy Governors) by Central Government (1948).		Bank nationalized, and provision of column (3) enacted, in 1948.
Italy	Major commercial and savings banks (controlled by Government) and publicly owned insurance companies (1936).	do	The Interministerial Committee for Credit and Savings, presided over by Minister of Treasury and including other cabinet members and with Governor of Bank present, formulates monetary and credit policy for execution by the Bank (1947).	By Superior Council with approval of President of Republic. "Director" and "Deputy Director" similarly (1948).	12 members of Superior Council other than Governor: by stockholders, with approval of President of Republic (1948).	Policy-making function transferred from Minister of Treasury to Interministerial Committee in 1947.
Japan	Minimum of 55 percent Government, remainder private (1942).	Minister of Finance supervises Bank and may, if deemed especially necessary for the attainment of the objectives of the Bank, order the Bank to undertake any necessary business, or order alterations in the bylaws as well as other necessary actions (1942).	Policy Board (see column 6) is empowered to formulate, direct and supervise policies of the Bank. Policy Board includes 2 nonvoting representatives of Ministry of Finance and Economic Stabilization Board (1949).	By Cabinet (1947; formerly Emperor, 1882). Vice Governor similarly. "Directors" by Minister of Finance on recommendation of Governor of Bank (1942).	4 voting members of Policy Board other than Governor: by Cabinet with approval of Diet (1949).	Policy Board established in 1949.
Netherlands	Government (1948)	Minister of Finance is empowered to issue directions to the Governing Board of the Bank in order to coordinate monetary and financial policy of the Bank with the policy of the Government. If Governing Board objects to such a directive it may appeal to the Crown which decides the issue (1948).	A Royal Commissioner, appointed by the Crown, supervises the affairs of the Bank (1948).	Governing Board, by Crown:[8] President and Secretary (1903) and Executive Directors (1948).		Appeal to Crown established in 1948, superseding a decree of 1945 which had given unqualified coordinating powers to Minister of Finance. Bank nationalized in 1948.
New Zealand	Government (1936)	The Secretary of the Treasury is a nonvoting member of the Board of Directors (1933).	In the exercise of their functions the Governor and Board of Directors shall give effect to any resolutions of the House of Representatives in respect of any functions or business of the Bank (1950).	By Governor General on recommendation of Board of Directors. Deputy Governor similarly (1933).	7 directors other than Governor and Deputy Governor: by Governor General (1936).	In 1950 provision in column (3) was substituted for power of Secretary of Treasury, granted to him in 1939, to give directives to the Bank.

See footnotes at end of table.

EXHIBIT L—Continued

Tabular summary of principal provisions relating to ownership and governmental control of central banks of countries with parliamentary form of Government [1]—Continued

Country	Ownership (1)	Statutory relationship between minister of finance and central bank (2)	Other forms of central bank responsibility to government [2] (3)	Appointments [3] of— Governor [4] (4)	Appointments [3] of— Directors [5] (5)	Principal recent changes with respect to previous legislation (6)
Norway	Government (1949)	None specified	None specified. An amendment of 1923 provides specifically that no member of the Government may be a Director or member of the management of the Bank.	By King. Deputy Governor similarly (1917).	3 directors other than Governor and Deputy Governor: by Parliament, (1917).	Nationalized in 1949.
South Africa	Private (1920)	do	None specified	Of 11 directors, 5 (including Governor and Deputy Governor) by Governor General, 6 by stockholders (1920).		
Sweden	Government (1668)	do	The Riksbank is responsible exclusively to Parliament and to its Banking Committee (1934).	By Board of Directors.[9] (1809 or earlier).	Chairman by King, other 6 by Parliament (1809 or earlier).	The provision cited in column (3) was included in the Riksbank statutes in 1934 and formalized previous practice.
Switzerland	Majority by cantons and cantonal banks, remainder private.[10]	do	None specified	By Federal Government, on recommendation of Bank Council. Vice President and the third member of General Directorate similarly (1905).	Of 40 members of Bank Council, 25 by Federal Government, 15 by stockholders (1905).	
United Kingdom	Government (1946)	The Treasury may from time to time give such directions to the Bank as, after consultation with the Governor of the Bank, it thinks necessary in the public interest (1946).	do	Court of Directors (including Governor and Deputy Governor) by King. (1946).		Nationalized and provision cited in column (2) enacted in 1946.

1 Dates indicate year of enactment of legislative provisions cited.
2 Other than through appointments of governor and directors as shown in columns 4 and 5.
3 Appointments by "King", "Crown" or "Governor General" are made with advice of the Cabinet or a body equivalent to the Cabinet.
4 Or other chief executive officer. Method of appointment of his deputies is also shown in this column.
5 Or members of other policy-making or supervisory board.
6 After establishment in 1912 as a national bank, began gradually to exercise central banking functions and was established formally as a central bank in 1945.
7 On nomination of various cabinet members, to represent various interests.
8 From nomination list (2 persons each for President and Secretary, 3 for each Executive Director) drawn up jointly by existing Governing Board and a Board of Commissioners.
9 From among the 6 members of the Board elected by Parliament. Deputy-Governor is appointed by Board from among or outside themselves.
10 Under the 1905 charter cantons and cantonal banks could subscribe up to 60 percent of the capital. The present legislation (1921) contains no provision regarding ownership.

52. Discuss and evaluate, as far as your available information permits, the relative use of selective and general credit controls in foreign countries.

The use of selective credit regulations, i. e., policy instruments which are aimed at influencing credit extensions in particular areas, has considerably increased in many countries during recent years. Postwar programs of reconstruction and development and the world-wide shift toward a greater degree of central direction of national economies led to various attempts at promoting the granting of bank credit in some "priority" sectors of economic activity and at curtailing credit facilities available to the branches deemed "nonessential".

Nevertheless, it has been found that the use of general credit measures, i. e., instruments designed to affect the aggregate volume, availability, and cost of credit, continues to be essential. Several countries have instituted such special measures of general credit influence as combined cash and security reserve requirements which are discussed in greater detail in Question G–53. After the outbreak of the Korean war, which led to new inflationary pressures in almost all countries, traditional weapons of general credit policy were resorted to more frequently than before, as is indicated by the appended table (Exhibit M, p. 511), on recent changes in central bank discount rates. Several countries, such as Sweden and the Netherlands, and recently also the United Kingdom, which during the postwar years had relied principally on direct nonfinancial controls (price and wage controls, rationing, allocations) or on selective credit regulation, rediscovered the essentiality of general credit measures. In general, postwar experience has gradually led to a better understanding of the way in which general and selective controls can complement and reinforce each other.

The varieties of selective credit regulations used by foreign countries differ in character and purpose from those used in the United States. In this country, selective measures are primarily understood to include consumer, stock market, and real estate credit regulations, which meet the conditions for selective credit regulation set forth in the answer to Question F–38. With the exception of consumer credit regulations in Canada, these measures do not play an important role in foreign countries since the types of credit involved do not affect the total credit and monetary picture nearly as much as in the United States.

There is also some difference between the United States and foreign countries in regard to the economic function assigned to selective credit measures. In this country the purpose of selective credit measures has not been primarily to channel credit away from some non- or less-essential and toward essential or more highly emphasized economic activities. Rather, the central purpose has been to prevent the economy from being unduly inflated or deflated through the highly volatile character of the demand for certain types of credit. In other words, stock market, consumer, and real estate credit regulations in this country aim principally at influencing the flow of particularly important, unstable, and pervasive tributaries of the general flow of credit.

The situation is somewhat different for most selective measures adopted by foreign countries. Broadly speaking, such measures have had their origin in an attempt to influence the allocation of economic resources, i. e., an effort to promote or curtail financing of broad categories of economic activities. Of the special measures taken in the United States, the Voluntary Credit Restraint Program falls most closely into this category.

The use of selective credit measures in various countries must be viewed with reference to the degree of prevalence of direct nonfinancial or "physical" controls, particularly rationing, allocation of raw materials, licensing of new construction, etc. If these physical controls could be made all-embracing and fully effective, there would be little need for selective credit regulations (or for capital issue controls which in most countries are closely related to selective credit measures). In practice, however, it has been felt that selective credit measures can play a useful role in applying restraint at points not reached by the physical controls and they have been so employed in a number of foreign countries.

On the other hand, foreign experience shows that when selective credit measures have been relied on to induce a desired allocation of resources or direction of investment without any help on the part of physical controls, results have often been disappointing, largely because of leakages, the importance of self-financing, and the ability of enterprises to use their own funds for nonessential expenditures while requesting credit for their essential investments. In France, for example, an ambitious attempt was made to apply selective measures in the absence of effective physical controls but, as is pointed out below, the French experience fell far short of success. Other countries without an elaborate machinery of direct controls, such as Belgium, Italy, and Western Germany, have avoided comprehensive attempts to influence commercial bank lending in a selective way and have relied primarily on general credit measures, some of which are discussed in the reply to Question G-53.

A measure that restrains the availability of credit for some economic activities implies a desire to promote the financing of other activities. Nevertheless, a rough dividing line can be drawn between measures that are taken primarily to hold back undesirable types of credit and measures that promote directly credit in favor of various economic categories regarded as either deserving or neglected (farmers, small business, defense plants, housing, etc.).

Use of selective measures to promote the financing of particular economic activities has been widely practiced in foreign countries as in the United States, within the framework of general credit objectives. The principal instruments have been the creation of special credit institutions with the help of governmental funds, guarantees, and the granting of special rediscounting facilities. A survey of these specialized credit institutions and instruments lies outside the scope of this question, but it may be of interest to mention a current attempt to maintain stability in the over-all volume of credit while promoting credit for special purposes. In accordance with an agreement between the Danish Government and the National Bank of Denmark, the latter resumed in September 1951 the practice of rediscounting building loans made by the private banks—a privilege which had been withdrawn in October 1950. Rediscounting is being resumed on the understanding that if an expansion of the money supply results, it will be offset by a combination of debt management and monetary operations, viz., sales of bonds by the government (with the proceeds presumably to be held idle). The selective encouragement of building activity is therefore being made formally contingent upon a general limitation of credit for all other purposes.

The instruments adopted in foreign countries to provide for selective restraints of credit may be subdivided into three categories, the first of which consists of voluntary arrangements between the central bank and the commercial banks or of directives of the central bank to the banks, the implementation of which is left to the banks. The second kind of selective restraint tried in foreign countries consists of detailed arrangements by which the central bank assumes the function of screening all important prospective bank credits for their "essentiality." Finally, a third method consists in using impersonal instruments, often by varying the instruments of general credit influence in such a way as to make them serve selective purposes. Examples are differential rediscount rates and reserve requirements with certain loan assets eligible to count as reserves.

The following discussion deals with examples of these three types of selective instruments and with their relation to general credit measures in a number of foreign countries.

Voluntary selective measures and broad central bank directives

There is much variation in the degree of reliance by different countries on voluntary selective measures. In the past few years, for instance, most central banks have, at one time or another, issued statements recommending self-discipline to the banks and cautioning them against the granting of nonessential or speculative credits. Such very general warnings can hardly be considered as the application of selective regulations even though, in a country with a banking system consisting of a few large branch banks, such exhortations may be fairly effective for a time, especially if they are coupled with an indication that, if they are not heeded, mandatory measures will be taken. However, we shall deal here only with some examples of more formalized attempts to control credit on a basis that is both selective and voluntary.

United Kingdom.—Only one step removed from pure exhortation are the selective restraints on bank lending used in the United Kingdom. From time to time, the Treasury issues requests that the banks conform in their lending practices to the directives that have long been issued to guide the deliberations of the Capital Issues Committee in its review of applications for stock and bond flotations. These directives, which reach the clearing banks through the Governor of the Bank of England, set up the broad economic categories (export industry, defense production, etc.) in which investment activity is being encouraged by the Government. In addition, all bank credits in excess of £50,000 not made in the ordinary course of business of the borrower must be submitted by the commercial banks to the Capital Issues Committee for prior approval.

Thus, to a very considerable extent, reliance for screening applications for credit is placed under the British system upon "the officials of each (commercial) bank and their unique knowledge of the needs of their customers" with guidance only "of a fairly general kind" from the Government.[78] The clearing banks have been asked to use every endeavor to insure that inflationary pressures are held in check. In practice, it is the responsibility of the banks to see that their lending is limited in volume and that all loans and advances are for approved purposes.

Until the recent change in monetary policy, the authorities relied almost exclusively on this selective procedure for controlling the volume as well as the composition of the banks' private loans and advances. It is true that, in the long-term market, over-all credit policy worked in harmony with the objectives of the selective mechanism following the abandonment of the attempt in 1946–47 to drive long-term yields down to 2½ percent. In the short-term market, however, the rate on Treasury bills remained fixed at its postwar low of one-half of 1 percent and was maintained at this level, when necessary, by Bank of England purchases; to minimize such purchases, the authorities relied on the compliance of the banks with the official directives concerning bank lending. This policy could be maintained for a long time because the selective control procedure operates in the United Kingdom under a set of particularly favorable circumstances: the organization of the British banking system into a few large banks with many branches, the tradition of close cooperation between the banks and the monetary authorities, and the presence of effective physical controls. Favored by these conditions, the selective controls used in the United Kingdom are generally considered to have had a real effect on the lending policies of the commercial banks. Nevertheless, the intensification of inflationary pressures after Korea and, in particular, the substantial expansion of private bank credit which took place in the course of 1951 raised doubts about the wisdom of continuing to rely entirely on selective controls. In the summer of 1951 the advisability of a change in monetary and credit policy was widely discussed in the financial press.

It was not until after the October elections, however, that such a change was actually carried out. On the ground that the previously used methods of restricting bank credit had failed to give adequate results, the Chancellor of the Exchequer announced a series of measures aiming at restricting bank credit by curtailing the liquidity of the commercial banks and by limiting access of the money market to central bank credit. The monetary authorities have thus decided to reinforce the selective regulations by general measures affecting the volume, availability, and cost of credit. These new measures are described in the reply to Question G–53.

Sweden.—In Sweden, shortly after the Korean outbreak, the commercial banks reached an agreement with the Riksbank for the voluntary restriction of credit. The agreement contained five general rules intended as guides to lending policy: (*a*) preference in meeting loan requests was to be given to activities promoting exports or reducing import requirements; (*b*) direct or indirect consumer credit financing was to be restricted; (*c*) advances for speculative purposes were not to be granted; (*d*) stricter collateral and amortization rules were recommended, particularly for real estate financing; and (*e*) all prospective security issues were to be reviewed in advance by the Riksbank.

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[78] Chancellor Gaitskell in statement on financial and economic situation, Hansard No. 198, July 20–July 26, 1951, col. 2345.

Here again, except for the last point, the banks were left free to interpret and implement these principles themselves. In contrast to the United Kingdom, however, the adoption of the voluntary restraint program for a time went hand in hand with the imposition of general credit measures. Combined cash and security reserve requirements were imposed on the banks in September 1950 and before that, almost immediately after Korea, the Riksbank ceased to support the market in long-term government securities where it had been maintaining a 3 percent yield throughout the postwar period. Operations of flexible support were resumed, however, in December 1950 after the rate had risen by about one-third of 1 percent. The Swedish Commercial Banking Association has recently pointed out that selective restraints can work only when general credit measures are effective—presumably because once general measures have made the individual bank want to restrict credit, then and then only will it be ready and even anxious to follow the rationing criteria that are propounded to it by the authorities.

Australia.—The central bank, the Commonwealth Bank of Australia, has used both selective and general controls in attempting to combat the persistent inflationary pressures of the postwar years.

The most prominent general device has been that of the "special accounts," i. e., deposits which the banks must establish at the Commonwealth Bank in an amount related to the increase in their total assets during a certain period. In economic effect, this device operates like a high reserve requirement against new deposits.

In addition, the Commonwealth Bank has used selective regulations which, in some respects, represent a transition toward the mandatory screening procedures which will be commented upon in the next section. The latest directive was issued by the Bank in November 1950 when the rise in wool prices gave new impetus to the domestic inflationary forces. Under this directive, finance for capital expenditures and permanent nonfluctuating working requirements should be obtained in the capital market, leaving only fluctuating operating requirements to be provided by bank credit. The directive also presents a detailed outline of the desirable credit policy for the different branches of economic activity. In general, the interpretation of the directives is left to the individual bank. Unsatisfied borrowers, however, may appeal to the Commonwealth Bank, which must also be given the reasons for the bank's denial, and the banks themselves may submit to the Commonwealth Bank doubtful cases for guidance.

Despite the drastic character of the special accounts procedure and the direct regulation of important types of bank lending, Australia has undergone in the postwar period an appreciable monetary expansion and a sustained inflation of prices and incomes. Inflationary pressures have been particularly strong because of the large-scale immigration and investment programs, the soaring world prices for certain major export commodities, and the massive inflow of foreign funds for both investment and speculation which have characterized the Australian economy over the past few years.

Selective screening by central bank

Two European countries, France and the Netherlands, have attempted to make the granting of all large bank credits subject to screening by the central bank. Broadly speaking, the experience of both countries has been similar. The attempt to apply only direct measures of credit regulation originated in the idea that, after the destruction of the war, certain economic activities should be encouraged and others discouraged. It was therefore thought that this situation left no room for the application of nondiscriminatory general credit and monetary measures. In both countries, however, the exclusive reliance on selective regulation of loans proved ineffective. In France, the rapid inflation of the postwar years up to 1948 provided a seemingly irrefutable justification for the soundness of, and need for, every individual loan. In the Netherlands, under postwar conditions of repressed inflation, most business firms were able to finance themselves without recourse to bank credit by drawing on their cash reserves. Moreover, the central banks of both countries experienced real difficulties in coping with the administrative burden involved in screening credits.

In both countries there has been a retreat from the exclusive reliance on selective methods during the past years. In France, the credit restrictions of October 1948, which contributed importantly to the halting of France's postwar inflation, were of a general credit restraint nature. They consisted in the establishment of rediscount ceilings and the introduction of combined cash and security reserve requirements. At the same time, the role of the selective regulations exercised by the Bank of France was de-emphasized; detailed regulations prohibiting or restricting credit to various economic categories were successively withdrawn; and the amount beyond which loans had to be submitted to the Bank of France for prior approval was raised in 1948 from 20 million francs (then equivalent to about $75,000) to 50 million francs, to 100 million francs in 1950, and to 500 million francs (equivalent to $1.4 million) in 1951. On the other hand, special credit or rediscount facilities have been granted to various economic activities where investment was considered desirable, such as export industries, housing, etc. On the whole, the French approach to credit policy has veered away from primary reliance on selective restrictions to a combination of general credit restraints and selective promotion.

In the Netherlands the change has been more radical. When the Korean events resulted in heavy new inflationary pressures on the Dutch economy, it was decided to abandon the selective restraints applied since the end of the war and to substitute for them general measures of credit restriction. The obligation of banks to submit any credits exceeding 50,000 guilders for approval by the Netherlands Bank was replaced in January 1951 by a combination of reserve requirements and credit ceilings designed to make the discount policy of the central bank effective. The discount rate of the central bank, which had remained at 2½ percent since 1941, was raised to 3 percent in September 1950, and to 4 percent in April 1951.

Selective instruments of an impersonal character

Faced with the cumbersomeness of detailed central bank screening, on the one hand, and with the uncertain effectiveness of purely voluntary selective restraints, on the other, it is natural that some countries, in seeking a selective distribution of bank credit, should have looked for an equivalent of the tested devices of general credit influence. This type of device possesses the advantage of providing a framework which influences the demand and supply of credit in an impersonal way. Individuals and institutions seeking or supplying credit are free to make their own decisions on the basis of the availability of reserve funds, the level of interest rates, and other credit conditions influenced by the actions of the monetary authorities. Several countries have attempted to transfer these advantages to the selective credit approach by varying the general credit instruments in such a way as to make them serve selective purposes. Where this has been done it is generally no longer possible to speak of general and selective measures as competitive or complementary instruments. It is the essence of this procedure to seek the objectives of general and selective credit devices at the same time and through the same instrumentality.

Measures affecting the demand for credit.—In general, the granting of preferential interest rates for certain types of loans either through public subsidies or by arranging for special rediscount facilities at the central bank is probably the most widely used selective instrument in foreign countries. One device of this kind, particularly widespread in Latin America, is the use of multiple discount rates. The principal usefulness of preferential interest rates is in promoting credit for specific well-defined purposes (agriculture, reconstruction, export, etc.) rather than in a general sifting of "essential" from "nonessential" credits. In cases where preferential rates have been employed for the latter purpose their use has apparently proved disappointing. In France, for instance, an attempt was made in 1947 to set up two discount rates, one for bills representing sales and another higher rate for all other bills, with the purpose of discouraging credit for speculative purposes. In 1948, however, a unitary discount rate was restored—a clear recognition that the system of two discount rates had failed to give adequate results. The fundamental difficulty with a dual rate system is that enterprises will tend to finance through borrowing, at the lower rate, all their expenditures which are eligible for such financing while using their own funds for financing expenditures which the higher rate is designed to discourage.

Another method of affecting in a general way the demand for specific categories of credit is to regulate such terms and conditions as the loan margins, length of credit, and down payments. This is the principal feature of the selective credit regulations applied in the United States to stock market, consumer, and real estate credit. As has already been pointed out, these selective methods are not widely used in foreign countries because the types of credit involved are not nearly as important there as here. Only Canada has similar regulations with respect to consumer credit; these regulations are administered not by the central bank but by the Commonwealth Department of Finance. But even in Canada, the volume of credit thus regulated is much smaller in importance than in the United States.

Measures affecting the supply of credit.—On the supply side, foreign countries have used a variety of measures affecting the ability and willingness of the banks to extend credit to different categories of borrowers. In many foreign countries legal reserve requirements can be satisfied in part by the holding of government paper and thus give a privileged position to the government as a borrower (see reply to Question G–53). Mexico has gone further in this direction and has permitted bank loans to certain classes of private borrowers to be counted toward the satisfaction of one-half of a 100 percent reserve requirement against increases in deposits which was instituted in 1949. Little is known about the results of this regulation, but apparently it was not entirely satisfactory since in January 1951 it was superseded by a new 100 percent cash reserve requirement against increases in deposits.

A time-honored device consists in imposing a certain maximum ratio of total assets or total liabilities to the capital and reserves of a bank. This device which has traditionally been used to protect the solvency of individual banks or as a general credit policy instrument can be turned into a selective control device by relating specific classes of assets to capital and reserves. This was done in the Federal Republic of Germany in January 1951 in connection with efforts to correct the huge intra-European deficit which Germany was running during the first months of the operations of the European Payments Union. Commercial banks were advised to keep their total short-term credits within 20 times their capital and reserves, as well as within 70 percent of their total liabilities; but, in addition to this measure of general credit restraint, banks were to keep their acceptance credits for foreign trade transactions within seven times their capital and reserves and all other acceptance credits within three times their capital accounts. These specific limits were to affect primarily credits to importers and in general those operations of the banks which give them ready access to Central Bank credit (acceptances are the prime means of rediscounting in Germany). These measures proved insufficient to check the expansion of credit and in March they were supplemented by a central bank directive to the banks to reduce the total volume of their credit by 1 billion Deutschemarks or to a level about 7.5 percent below that of January 31, 1951.

Concluding observations

(1) Since the end of World War II, a number of foreign countries have made use of various selective credit regulations in addition to general instruments of credit influence. The general instruments, however, have been the main reliance in restricting excessive credit and monetary expansion, particularly in countries where comprehensive nonfinancial or physical controls (rationing, etc.) were absent.

(2) In experimenting with various types of selective controls, foreign countries have failed to obtain satisfactory results with detailed central bank supervision of the credit-granting process.

(3) Postwar experience appears also to have demonstrated that, to be effective, selective restraints of a voluntary character or based on general central bank directives need the underpinning of general credit policy to insure that banks, influenced by a tightening of their liquidity position, exercise the desired degree of selective restraint in their lending activities.

(4) Attempts of foreign countries to refine some of the traditional impersonal instruments of credit influence in such a way as to make them serve selective purposes do not appear to have been successful.

(5) Since Korea, use of general credit policy instruments has markedly increased, sometimes hand in hand with the adoption of new selective measures, but sometimes also with accompanying de-emphasis of the selective regulation approach.

(6) The selective credit regulations adopted in most foreign countries differ in character and purpose from those applying in the United States. The United States regulations have sought out specific areas in which credit practices and procedures are comparatively standardized and in which the volume of credit is subject to particularly wide swings; the foreign regulations represent in general more ambitious attempts to influence the allocation of economic resources among essential and nonessential uses.

EXHIBIT M

Principal discount rate changes since Korea

Country	Rate before Korea		Rate established since Korea	
	Percent	Unchanged since—	Percent	Date established
India	3	Nov. 28, 1935	3½	Nov. 15, 1951
United Kingdom	2	Oct. 26, 1939	2½	Nov. 8, 1951
Netherlands	2½	June 27, 1941	3	Sept. 26, 1950
			4	Apr. 17, 1951
Canada	1½	Feb. 8, 1944	2	Oct. 17, 1950
Sweden	2½	Feb. 9, 1945	3	Dec. 1, 1950
Denmark	3½	Jan. 15, 1946	4½	July 4, 1950
			5	Nov. 2, 1950
Japan	5.11	July 5, 1948	5.84	Oct. 1, 1951
Finland	5¾	July 1, 1949	7¾	Nov. 3, 1950
			5¾	Dec. 16, 1951
Germany	4	July 14, 1949	6	Oct. 27, 1950
Belgium	3¼	Oct. 6, 1949	3¾	Sept. 11, 1950
			3½	July 5, 1951
			3¼	Sept. 13, 1951
France	2½	June 9, 1950	3	Oct. 12, 1951
			4	Nov. 9, 1951

53. Discuss and evaluate, as far as your available information permits, any devices used in foreign countries to insulate the market for government securities from the private credit market.

What is insulation of the market for government securities?

Insulation of the market for government securities from the private credit market is here understood to include any arrangement which permits the monetary authorities to achieve simultaneously the following two objectives:

(1) Restriction of the availability of credit to private borrowers; and

(2) Creation of a situation in which the terms of Treasury borrowing may be determined without regard to the conditions prevailing for private borrowing.

In the absence of special "insulating" arrangements these two objectives would presumably conflict. Any action to tighten the supply and cost of private credit (or to prevent expansion of credit in the face of growing demands) would tend to result in a slackened demand and higher interest rates in the market for Treasury obligations. On the other hand, any direct intervention of the monetary authorities to support the market for government securities so as to maintain low yields at a time when holders are endeavoring to sell them would provide the banks with fresh reserve funds enabling them to expand private credit.

The insulating devices that have been proposed or that have been experimented with in various countries are therefore of two types:

(1) Immobilization of government securities with their existing holders through direct regulation, voluntary agreement, or other means; if successful, measures of this kind permit the maintenance of low interest rates on government securities without resort to central bank support operations.

(2) Direct limitation of the permissible volume of private credit; if successful, measures directed to this end reduce the incentive for commercial banks to liquidate government securities in order to expand loans, and also prevent them from expanding credit on the basis of increases in reserves resulting from central bank support of government security prices and yields.

Insulation and interest rate differentials

Ordinarily, successful measures aiming at insulation would tend to result in increased differences between the interest rates charged to private borrowers and those paid by the Treasury. Some differences between yields of government securities and of other high-grade bonds of similar maturities exist in all countries, and by themselves may merely reflect differences in risk, usability as collateral, etc.

Even divergent movements between interest rates for private borrowers and rates charged to the Treasury are not necessarily conclusive indication that insulating action has been taken by the authorities. Recent developments in the United Kingdom furnish an illustration of this lack of connection. A rise in money market rates for commercial paper occurred during the summer of 1951 without any corresponding rise in the Treasury bill rate. The resulting differential did not reflect any new insulating action on the part of the authorities; rather, it proved to be, as is discussed below, the first step in a sequence of events which, in November 1951, resulted in a move away from the insulation of short-term Treasury paper which had prevailed in the United Kingdom during the war and postwar periods.

On the other hand, divergent movements of interest rates are not bound to occur in the wake of insulating measures. When these measures have been taken primarily to keep private credit from expanding, rather than to maintain low interest rates on government securities, rates on government securities may very well fluctuate with other rates, as indeed did occur in most Western European countries that adopted security reserve requirements.

Insulation in the longer-term market

In the United States during the postwar period, the inflationary effect on the supply of credit and money of Federal Reserve open market operations in support of yields and prices of Government securities raised the question of some method of insulating the Government market from the market for private credit. The problem of an appropriate method presented especially serious difficulties because of the broad ownership distribution of longer-term Government securities among nonbank as well as bank investors. As long as the Federal Reserve functioned as a residual buyer of Government securities of some or all maturities, its purchases of such securities sold by nonmember bank investors had the effect of adding to bank reserves just as its purchases of securities sold by member banks themselves. As a result of the Treasury-Federal Reserve accord in March 1951, pegging of Government securities was discontinued, but the simultaneous conversion of a substantial volume of long-term marketable securities into a new nonmarketable bond issue constituted a cushioning or partial insulating device with respect to the long-term segment of the market. These actions received reinforcement from other credit restraint measures, such as selective credit regulations and the voluntary credit restraint program applicable to almost all types of financial institutions.

In most foreign countries the problem of insulating the long-term security market has not arisen because the policy that created this problem in the United States, namely, pegging of long-term yields with resulting large-scale monetization of long-term bonds, was not widely adopted abroad. Examples of countries with somewhat similar experiences are the United Kingdom, Sweden, and Canada.

In the United Kingdom in 1946–47, the short-lived attempt to reduce the yield on long-term securities from the wartime level of about 3 percent to 2½ percent, and to hold it there, resulted in an expansion of the money supply. For insulation of the volume of private spending from this development, the authorities relied primarily on the existing direct nonfinancial controls. In addition, in the field of private credit, the expansionary effect of the cheap money drive was thought to be sufficiently counteracted by the assumed compliance of the banks with the official directives for selective restraint in bank lending (see reply to Question G–52). It soon became clear, however, that, in spite of these safeguards, the official financial policy with respect to the long-term market had unstabilizing consequences both domestically and on the British balance of payments.

Since early 1947, long-term interest rates in Britain have moved upward and are currently slightly in excess of 4 percent for long-term government securities. The British authorities have not intervened in the long-term market except for steadying purposes, and in July 1951 the Chancellor of the Exchequer expressed the view that the rise in long-term interest levels had been helpful in curbing nonessential investment.

In contrast to the United Kingdom, the Swedish and Canadian authorities have actively and over a long period supported a more or less fixed long-term rate through open market operations. In each case this policy has created difficulties for the restraint of private credit expansion and eventually gave rise to attempts at insulation.

In Sweden, the support policy was pursued from the end of the war to the middle of 1950 and led to heavy Riksbank purchases of long-term securities, particularly in 1947–48. Concern over this development led the Riksbank in the middle of 1948 to negotiate an agreement with the Swedish life insurance companies by which these companies committed themselves to maintain their bond holdings during a period of 6 months. The agreement is said to have worked satisfactorily.

In Canada, where government bond prices had also received steady, though somewhat flexible, support throughout the postwar period, the decision at the end of September 1950 to let the Canadian dollar fluctuate freely was followed by unpegging of bond prices. This in itself was a major step in reducing private offerings of government securities in the market, but two additional measures of a specifically insulating character were used to re-enforce it in curbing private credit expansion and in cushioning its effects on the government securities market. In a public statement issued in February 1951, the Bank of Canada expressed the view that any further increase during 1951 in aggregate bank lending and in bank holdings of nongovernment securities should be prevented, and the private banks agreed to cooperate in curtailing inflationary credit expansion. In April the insurance companies agreed voluntarily to limit new private investment to net premium receipts. In effect this meant that they would not sell government issues in order to expand loans to private borrowers or to increase holdings of other private investments; thus, by lessening the supply of government bonds, there would be less pressure on their yields.

These Swedish and Canadian measures—typical of countries with a closely knit financial structure—are far from representing a comprehensive or systematic policy directed at insulating the government securities market from the private credit markets. In 1950, when new inflationary pressures threatened the Swedish economy, the Riksbank preferred to let long-term yields rise rather than to rely again on a voluntary agreement with the insurance companies. The Canadian devices were adopted after unpegging rather than as an alternative to it. In this respect there is a similarity between the Canadian and American experience. In this country, as mentioned earlier, a cushioning or partial insulating device in the form of a nonmarketable issue was adopted simultaneously with unpegging and in connection with other credit restraint policies.

Insulation in the short-term market

In the short-term market, the question of insulation became important in the United States during early postwar years. Concern was directed in particular to the tendency, on the part of banks and other investors in short-term securities, to sell such securities to the Federal Reserve at very low fixed rates, thereby creating additional reserve funds which were used by the banks either to purchase longer-term securities in the market or to increase their loans. As early as 1946, however, there was some tendency toward tightening of credit conditions, though not yet reflected in interest rates, as Treasury debt retirement operations drew reserve funds away from the member banks to retire maturing securities held by the Federal Reserve. After the middle of 1947, efforts to hold down the levels of short-term interest rates on government and other paper were moderated and yields in this area of the market rose somewhat.

Abroad, the problem of insulation in the short-term market arose in circumstances quite different from those in the United States. In fact, the following discussion will show that most of the actions of foreign countries discussed below, while having the appearance of typical examples of insulation, were not undertaken with the dual objective of restraining private credit and stabilizing the terms of government borrowing, but were addressed primarily to the first of these objectives.

(1) *Security reserve requirements.*—The problem facing several countries of Western Europe in the course of the postwar period was to stave off rampant inflation. In a situation where government spending was still far in excess of revenue and where shortages of all kinds remained acute, this threat resulted directly from the ability of banks to turn their wartime and postwar accumulations of Treasury bills into cash (and thence into private credit). In dealing with this threat, several countries that were unable or unwilling to rely primarily on direct nonfinancial controls resorted to the enactment of special security reserve requirements which immobilized all or most existing bank holdings of Treasury bills and required a substantial investment in Treasury bills of any new funds accruing to the banks.

Available information on these experiments shows that this and similar insulating devices were not adopted primarily to keep short-term rates down for the government. Rather, under the then prevailing circumstances, these devices held out the only promise of effectively preventing excessive monetization of short-term government debt. Similarly, a rise in short-term interest rates was considered incapable by itself of preventing monetization of the short-term debt, rather than as merely undesirable because of its impact on the budget. In many of these countries, short-term rates were already at relatively high levels but nevertheless failed to discourage prospective borrowers because of the rapid rise in prices. In addition, banks were eager to shift back to a more normal composition of their assets and to help in financing economic reconstruction.

For these reasons, the monetary techniques adopted were resorted to as the only practical method of checking inflation. The security reserve requirements had the purpose—and the effect—of making effective the discount rates set by central banks. But short-term rates remained flexible and often moved upward after the imposition of reserve requirements, not only for private borrowers but also for Treasury obligations.

The security, or combined cash and security, reserve requirement has operated with evident satisfactory results in Belgium where it was first instituted in 1946 with the express purpose of restoring effectiveness to the central bank's discount rate; in Italy, where it formed the core of Einaudi's famous credit restrictions introduced in 1947; and in France in 1948 where, supplemented by rediscount ceilings (see below), it also played an important part in halting the postwar inflation. The Netherlands and Sweden, which had previously relied on direct controls to restrain inflation, imposed security reserve requirements in the course of the year following upon the outbreak of war in Korea. Austria, which had attempted to hold back bank credit expansion through informal rediscount ceilings, found it necessary to introduce security reserve requirements in April 1951. The great variety in the detail of these requirements from one country to another is shown in Exhibit N (p. 518) to this reply.

While the principal purpose of these security reserve requirements has been to prevent monetization of the short-term public debt held by the banking system, an important by-product, particularly in France and Italy, has been the assurance of continued assistance from the banks in the financing of budget deficits.

Outside of Europe, security reserve requirements have rarely been used as an important instrument of credit and monetary policy. In some countries, particularly in Latin America and in India and the Philippines, banks are permitted to satisfy some part of their reserve requirements through the holding of government securities. In some of these countries the governments have traditionally encountered considerable difficulties in developing a money market and in lodging government securities, short- or long-term, with any investor but the central bank. By permitting securities to be substituted for cash reserves, the banks are given an incentive to invest in them. In such cases, an ultimate aim in adopting security reserve requirements was to find lodgment for government securities and to help finance government deficits outside the central bank. In some countries, the permission to count securities as reserves was a concession to the banks enabling them to hold larger reserves without a corresponding sacrifice of income. In none of these cases has insulation of a government securities market from the private credit market been a primary objective.

(2) *Direct limitation of private credit volume.*—An alternative to the imposition of security reserve requirements as a means of preventing excessive monetization of short-term government debt is the placing of a direct limit on the volume of the banks' private lending. Such a limitation, if effective, would stop banks from seeking alternative uses for their funds tied up in Treasury paper.

Formal ceilings on the private credit volume which commercial banks are permitted to extend have not been used widely because of the rigidity inherent in this method. In France, where new reserve requirements were introduced in 1948, ceilings were also established, not on the total private credit volume granted by each bank, but on its rediscountable portion. After a time, however, this system proved inadequate. As a result of numerous exemptions and "safety valves," credit expansion was eventually resumed and it became necessary recently to introduce a whole set of new and higher ceilings. In the Netherlands, legislation adopted at the beginning of 1951 has given the banks the option of maintaining their private credit volume within a certain limit or of satisfying a combined cash and security reserve requirement. It is reported that a large majority of Dutch banks have decided to live under the reserve requirement rather than under the credit ceiling. Both the French and the Dutch measures were aimed solely at the immediate objective of limiting credit expansion, and little thought was given to their incidental effect on the conditions of short-term borrowing by the Government.

In the United Kingdom a more flexible attempt was made to limit directly the volume of private lending not only to prevent inflation but also to reinforce the maintenance of stable and favorable conditions for Treasury short-term borrowing. Through a series of directives concerning the composition of bank lending, the British monetary authorities sought at the same time to limit the aggregate volume of such credit. As discussed in the reply to Question G–52, compliance of the banks with these directives helped to maintain the low rate of one-half percent on Treasury bills, with minimum Bank of England support. The large budget surpluses and the sterling counterpart of the import surpluses, which made it possible for the Treasury to retire bank-held Treasury bills or Treasury Deposit Receipts, provided banks with funds, thus obviating demands upon the Bank of England to supply funds through purchases of bills.[79]

These arrangements were tested severely by the economic developments following the outbreak of war in Korea. Active buying on the part of consumers at home and abroad, the rise in import prices relative to export prices, and rearmament made heavy new claims on Britain's economic resources. Provision for increased defense expenditures in the budget for 1951–52 removed the large surplus on whose disinflationary impact the Government had relied heavily during the three previous fiscal years. After the large increases in gold and dollar reserves during the 9 months following the outbreak of war in Korea, the foreign balance began to deteriorate in the spring of 1951. Internal strains, such as shortages of manpower, steel, and coal, also became more pronounced.

As a result of these developments and in particular of the large expansion in private credit during the first half of 1951, the British financial press (e. g., The Economist and The Banker) started questioning the advisability of continuing to rely entirely on the compliance of the banks with official directives for the restriction of private credit. In the meantime, the banks on their own initiative, but with the tacit approval of the central banking and Treasury authorities, raised their interest rates on trade bills and commercial loans, while the Treasury bill rate and the return on Treasury Deposit Receipts were held unchanged. This disparity in rates, however, was not indicative of any tightening in the availability of private credit. Nor was the increase in rates on business loans expected to affect significantly the borrowers' demands for credit. From the banks' viewpoint, the higher rates tended to make private lending more attractive than before and far more profitable than lending to the Government.

This situation confronted the credit and monetary authorities with a triple choice: (1) to continue against increasing odds to rely entirely on the self-discipline of the banks for the prevention of inflationary credit expansion (this was the policy pursued by the Labor Government until the elections); (2) to use additional insulating devices such as freezing existing Treasury bill holdings in the portfolios of banks and discount houses in order to restrict private credit and at the same time maintain prevailing interest rate differentials; or (3) to cease providing unlimited cash to the market through Bank of England purchases of Treasury bills at one-half percent and thereby to reinforce the currently practiced voluntary restriction of bank credits.

After the elections, the monetary authorities decided upon the third course. On November 7, 1951, the Bank of England's discount rate was raised to 2½ percent after having been held at 2 percent almost

[79] A word should be said about the Treasury Deposit Receipt as an "insulating" device. This instrument, which was created for emergency reasons in World War II, is a nonnegotiable and nontransferable Treasury obligation. The Treasury determines every week the total sum (if any) which the banks are called upon to invest in TDR's. Thus, lending to the Government by means of TDR's is fully insulated from the general credit market. In practice, however, the banks have been allowed to maintain enough of their assets in Treasury bills or call money to provide for adjustments in the composition of their assets. In other words, if short of reserve funds, the banks, instead of reducing private lending, could always have sold Treasury bills, let them run off, or failed to renew their loans to the discount houses. Thus, despite the insulation of part of the Treasury's financing in the form of TDR's, the continued use of bills meant that over-all insulation of Treasury financing was far from being attained in this way. Moreover, the importance of the TDR has decreased steadily since the war and today TDR issues amount to only 4 percent of the Treasury bills outstanding.

continuously for 19 years. At the same time the Bank introduced a new rate of 2 percent on loans secured by Treasury bills. The latter rate is of particular significance: while the central bank may continue to operate largely at the market rate—which has already risen from one-half to about 1 percent—it can now withhold accommodation except at the 2 percent rate as in fact it began to do on occasion in November. In this way the credit and monetary authorities have deliberately introduced uncertainty as to the terms on which short-term accommodation may be obtained from the central bank.

As a complementary measure, the Treasury has converted about one-fifth of the outstanding Treasury bills into 1-, 2-, or 3-year securities, yielding from 1¼ to 1¾ percent. This funding operation has reduced the liquidity of commercial banks, and, together with the new uncertainties as to official accommodation to the market, is expected to have a restrictive effect on private bank lending.

Even under the new policy it is clear that the authorities do not intend to let interest rates on the short-term debt rise any higher than is required for the desired restriction of private credit to take effect. In the first place, a preferential rate of 2 percent has been created for borrowing on Treasury bills; traditionally, the rate for short-term advances from the Bank had been one-half percent above, rather than below, the discount rate. Secondly, the authorities still buy and sell bills at the market rate and have thus far only on a few occasions forced the market to borrow at the 2 percent rate; thus, they are endeavoring to exert a restraining influence on private credit expansion principally by creating *uncertainty* as to central bank accommodation rather than by making this accommodation expensive. Finally, the new monetary policy has not supplanted existing voluntary credit restraint. New directives as to appropriate areas of bank lending were issued to the banks shortly after the recent monetary actions, an indication that the authorities by no means intend to dispense with this instrument.

The current monetary policy thus retains a number of features which may well continue to make for a lower level of short-term rates for the Government than for private borrowers. Nevertheless, it represents a decisive break with Britain's postwar attempt to limit the volume of private credit without allowing any variation in the terms of short-term Treasury borrowing.

Exhibit N

Detail of Cash and Security Reserve Requirements Adopted in Selected Countries for Purposes Related to Question G–53 [80]

Belgium (February 1946).—Banks are required to maintain a reserve of cash and Government securities equal to 50 to 65 percent (depending on the size of the bank) of sight and short-term liabilities. Cash reserves must be no less than 4 percent of these liabilities and securities must be at least four-fifths of the required cash and security reserve.

Italy (August 1947).—Banks are required to set aside an amount equal to 20 percent of their deposits in excess of 10 times their capital

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[80] In the countries covered in this exhibit, bank holdings of Government securities are predominantly short-term securities.

or an amount equal to 15 percent of their total deposits, whichever is smaller. This amount is to be invested in Government or Government-guaranteed securities for deposit at the Bank of Italy, or held in an interest-bearing blocked account at the Bank of Italy or the Treasury. Furthermore, 40 percent of any increase in a bank's deposits after October 1, 1947, is to be set aside in a similar fashion until the bank's total reserves reach 25 percent of its total deposits. From then on the percentage of any increase that has to be set aside falls to 25 percent so that eventually this ratio becomes a uniform requirement for all banks.

France (October 1948).—Banks are required to keep their minimum holdings of Government securities at 95 percent of the volume held on September 30, 1948. Twenty percent of any new deposits have to be invested in Government securities. In case of a decrease in deposits from the level of September 30, 1948, holdings of securities can be decreased by no more than 80 percent of the decrease in deposits.

Sweden (October 1950).—Banks are required to maintain a cash and Government security reserve equal to 6 to 10 percent (depending upon the size of the bank) of demand and term liabilities with the exception of savings deposits. Of the total reserve, 25 percent must be held as demand deposits with the central bank, and an additional 15 percent as demand deposits or as vault cash and other cash items.

Netherlands (January 1951).—Banks are required to hold a minimum reserve in Treasury bills and cash items amounting to 40 percent of demand liabilities. In addition, banks are given the following option:

(*a*) They may maintain a reserve of Treasury bills or cash at 90 percent of the average of their holdings as of June 30, 1949, and December 31, 1949. A similar reserve, to the extent of 67 percent, has to be established against increases in deposits.

(*b*) Alternatively, banks may maintain the volume of private credits at no more than 105 percent of the level reached as of September 30, 1950.

Austria (May 1951).—Banks entered into a voluntary agreement with the Austrian National Bank to maintain reserves in cash or Government securities amounting to 25 percent of deposits until December 31, 1951. After that date the reserve ratio will increase to 30 percent, with a minimum of one-third of the total reserve in the form of cash items.

H. The Banking Structure

54. Trace the principal changes in the functions and activities of commercial banks since the establishment of the Federal Reserve System, with special emphasis on the periods since the middle thirties. Cover changes in the various types of assets and liabilities.

Since the establishment of the Federal Reserve System, as before the System's existence, the primary functions of commercial banks in the nation's economy have been to:

(1) Serve as a depositary for the public's liquid resources and savings, and through the credit-granting process provide expansion of the country's means of payment;

(2) Provide a mechanism by which these resources may be transferred readily as between depositors and converted at the convenience of the depositor into currency and coin;

(3) Make credits available to the various sectors of the economy in such amounts as may be consistent with the current needs of the economy and a sound banking position, and through this process facilitate expansion of employment and output;

(4) Provide various service functions for the economy, including records of depositors' disbursements; collection of notes, coupons, and similar items; domestic and foreign transfers of funds; acting in various fiduciary capacities; acting as fiscal agents for Federal, State, and local governments; and providing similar agency services for others.

In performing the functions listed above, the activities of banks have undergone important changes. In general, these changes have been in the direction of (*a*) providing depositary and savings facilities to a growing proportion of the nation's citizens; (*b*) steadily improving the money transfer and conversion mechanism that commercial banks provide; (*c*) significantly broadening commercial bank lending activities to accommodate various classes of private and governmental borrowers and to provide credits on terms more closely tailored to the needs of borrowers; and (*d*) enlarging materially the scope of commercial bank service activities. Commercial banking today is certainly a more integral part of the financial life of the average American citizen than it was three and a half decades ago. A much larger segment of the population now makes regular use of banking facilities, through the ownership of a deposit account, through the cashing of a wage or salary check, through a consumer, mortgage or business loan, or through some form of service rendered by a commercial bank.

The various changes in commercial banking activities are traced in some detail in succeeding sections of this reply. Principal changes in the assets and liabilities of commercial banks from 1914 through mid-1951 are shown on Charts 17 and 18. The mechanics of the money supplying activities of banks are discussed elsewhere, especially in the reply to Question F–28.

Commercial Banks as Depositaries

Commercial banks provide an indispensable service to the economy as the most convenient depositaries for the liquid resources and savings of the public. Savings placed with commercial banks may take the form of demand or time deposits.[81] Such savings are then loaned out or invested and in this way are used to increase the nation's output and employment. Between 1920 and 1951, as may be seen in Table XIII, total deposits at commercial banks rose by about 115 billion dollars, or from 37 to 152 billion. This growth included increases of 75 billion in demand deposits, 25 billion in time deposits, and 14 billion in interbank and Government deposits.

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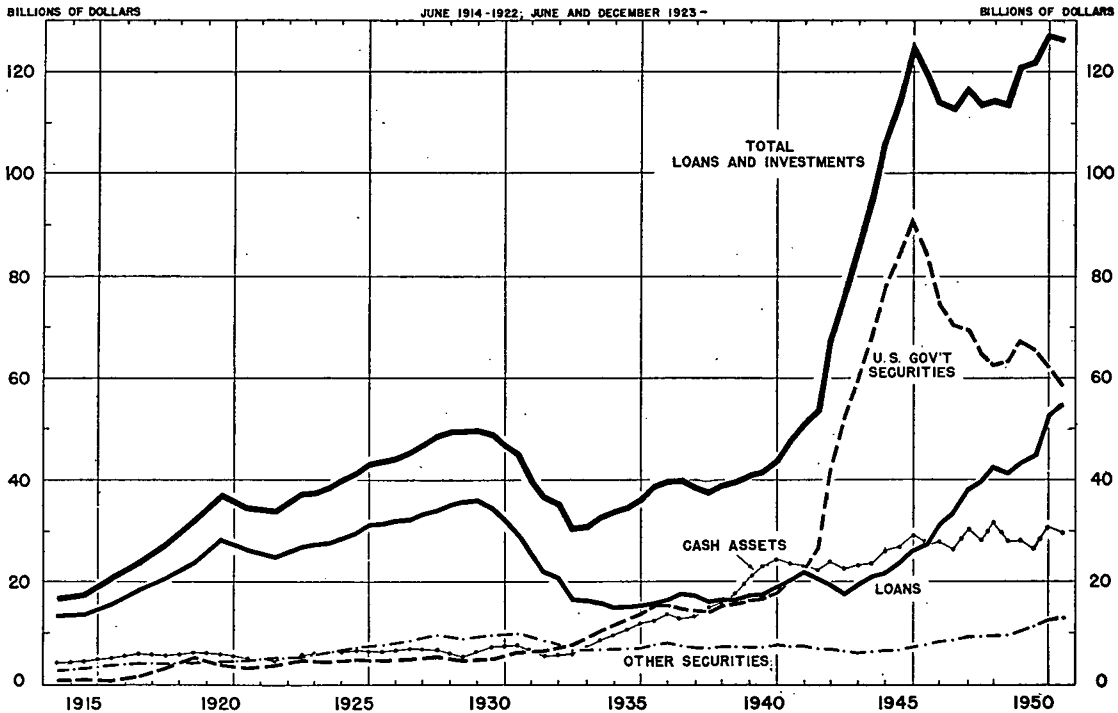
[81] In general terms, demand deposits under Federal law and regulation comprise all deposits payable within 30 days or subject to less than 30 days' notice of intended withdrawal; time deposits comprise all other deposits.

CHART 17

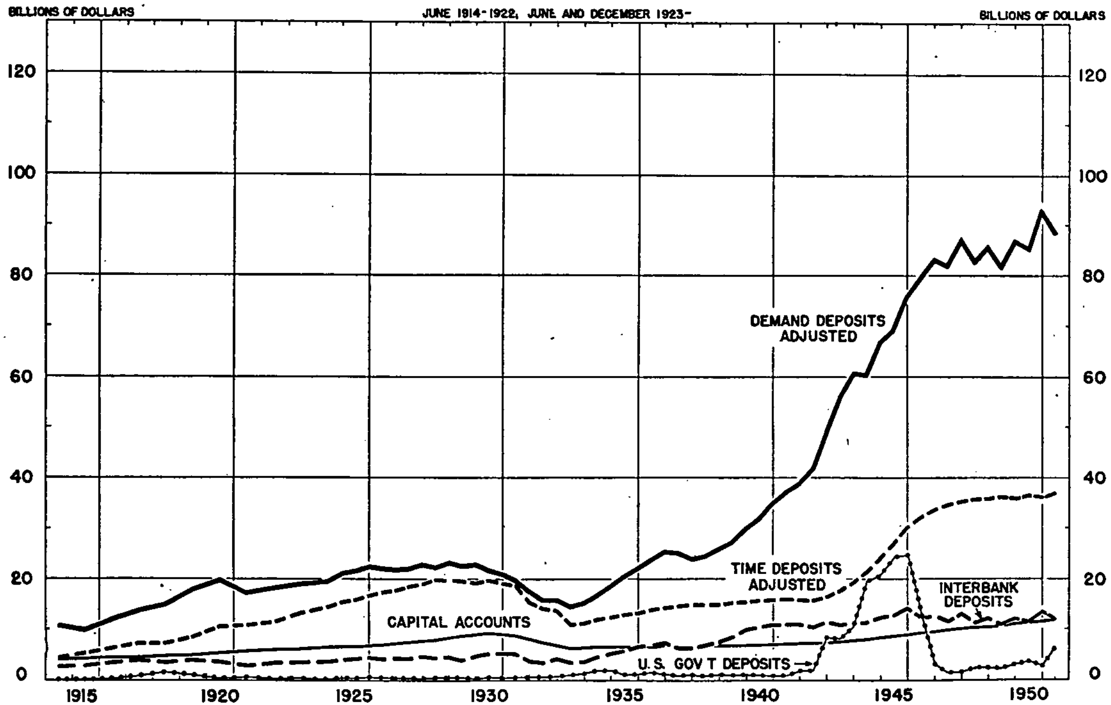
PRINCIPAL ASSETS OF ALL COMMERCIAL BANKS



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

CHART 18

PRINCIPAL LIABILITIES AND CAPITAL ACCOUNTS OF ALL COMMERCIAL BANKS



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

TABLE XIII.—*Deposits of all commercial banks on selected dates* [1]

Type of deposit	1914	1920	1930	1935	1940	1945	1951
	In billions of dollars						
Total	17.8	36.7	51.3	41.6	60.2	136.7	151.5
Demand	10.3	21.7	25.7	21.9	33.6	72.5	96.4
Time	4.7	11.0	20.2	13.3	15.6	27.2	36.8
Government	.1	.3	.3	.8	.8	24.4	6.3
Interbank	2.7	3.7	5.1	5.6	10.2	12.6	12.0
	Percentage distribution						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Demand	57.9	59.1	50.1	52.6	55.8	53.0	63.6
Time	26.4	30.0	39.4	32.0	25.9	19.9	24.3
Government	.5	.8	.6	1.9	1.3	17.9	4.2
Interbank	15.2	10.1	9.9	13.5	17.0	9.2	7.9

[1] Data are as of end of June. For years prior to 1951, they are taken from a preliminary tabulation of a revised series of banking statistics.

Demand deposits

Demand deposits of individuals and business firms serve primarily as working balances or checking accounts available for making payments for goods and services. To a considerable though unknown extent, however, they also represent savings being held indefinitely in this form or for investment whenever attractive opportunities arise. For the most part, as explained in the reply to Question F–28, demand deposits are created by the extension of bank credit. The newly created deposits may be converted into time deposits or used to discharge liabilities, to purchase assets, or to defray current expenditures.

The use of checks or drafts on demand deposits in making payment for goods and services has grown greatly in the United States over the years as the nation has grown and become more industrialized and as its financial transactions have become more complex. In considerable part, the general use of checks results from the fact that they provide a very convenient, inexpensive, and safe means of payment, for both out-of-town and local transactions. Although precise data are not available, Federal Reserve studies have indicated that more than 85 percent of all money transactions in the nation are settled by check. Surveys of consumer finances show that 41 percent of all spending units had checking accounts in 1951 compared with 34 percent in 1946. In recent years banks have provided checking services to an increasing proportion of individuals in the lower income groups by making available to them a variety of "no minimum balance" checking accounts. Depositors with such accounts generally pay a small charge for each check drawn rather than a fixed service charge when their balances drop below a specified minimum, as is the case in regular checking accounts.

Since the volume of demand deposits is directly responsive to the extension and contraction of bank credit, changes therein, as shown in Chart 18, tend to be in the same direction as changes in loans and investments. In times of Government deficit financing through the banking system, changes in bank holdings of Government securities may dominate changes in the volume of demand deposits held by the public. At such times account must be taken also of changes in Government deposits. When Government deposits change, offsetting changes are eventually reflected in either demand or time deposits of the general public.

The volume of demand deposits is, of course, also substantially affected from time to time by transfers of such deposits to the time deposit category, and by the accumulation in time and savings deposits of funds which initially came into existence by the extension of bank credit in the form of demand deposits. In periods when interest rates and investment opportunities are not sufficiently attractive, however, a greater proportion of the savings of individuals and businesses is retained in the more liquid form of demand deposits. Such a situation generally prevailed from the early thirties until early postwar years.

The large growth of demand deposits since the establishment of the Federal Reserve System has reflected and contributed to two war and postwar inflations. Thus, as is shown in Table XIII and Charts 18 and 19, demand deposits at commercial banks rose sharply during World War I and the postwar inflationary period that followed. They declined in 1921 along with prices and incomes and then rose gradually throughout the prosperous twenties. The depression of the early thirties brought with it a sharp contraction in the number of banks, in the volume of bank lending, and in the money supply, including mainly demand deposits. Demand deposits then increased fairly steadily but moderately to 1942, reflecting, first, the recovery in business conditions and, later, the beginning of war in Europe.

It was World War II that brought the sharpest increase in the money supply of this country. From 1942 through 1945, demand deposits at commercial banks almost doubled as a result of the large portion of Government military expenditures that was financed through bank credit expansion. Since the end of World War II, the expansion of demand deposits has continued but somewhat more moderately, reflecting mainly the large private credit demands of the period. This postwar expansion has occurred despite a marked contraction in bank holdings of Government securities.

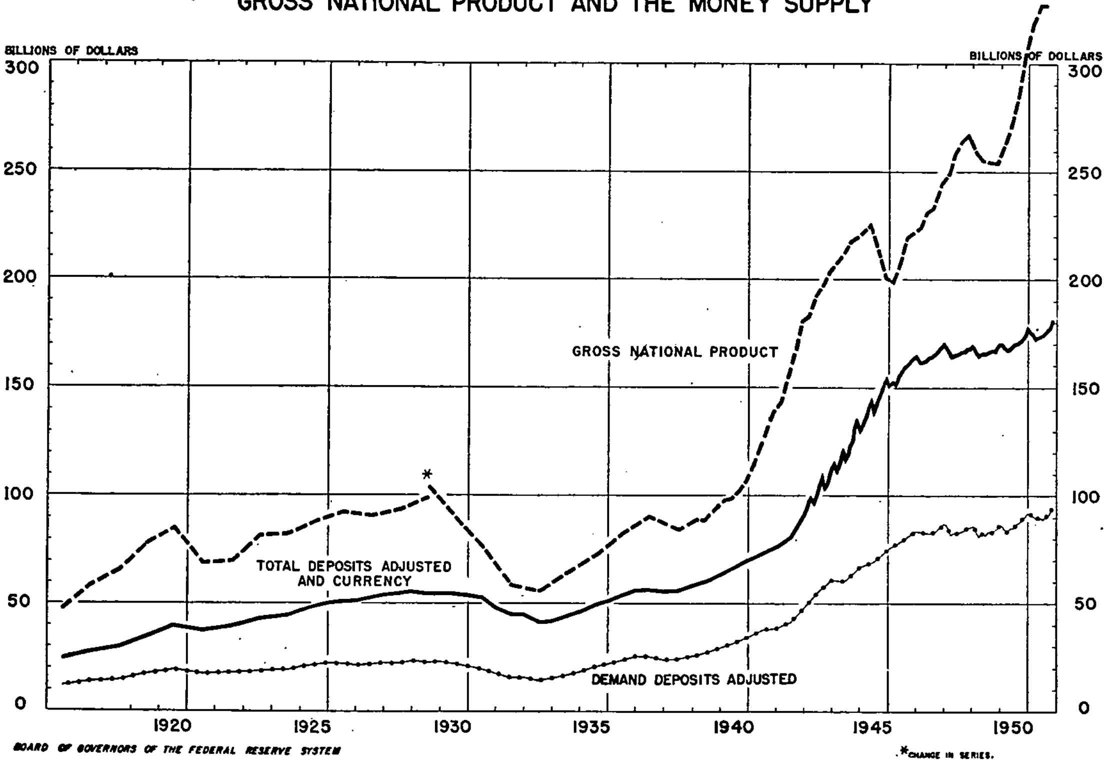
Time deposits

Although to a considerable extent demand deposits represent savings of individuals and businesses being held indefinitely in this form, savings are also placed with commercial banks as time deposits. Such deposits were about three times as large in 1951 as they had been in 1920—a growth which, though substantial, was much smaller than that shown by demand deposits.

This decline in relative importance of commercial bank time deposits over the years reflected in part the growth in the volume of savings of individuals channeled into life insurance companies, mutual savings banks, and savings and loan associations, which are in a position to attract savers with services and rates of return which commercial banks are legally or financially unable to provide. As can be seen from Table XIV, total resources of these three principal classes of noncommercial bank financial institutions rose from $15 billion in 1920 to $107 billion in 1951. Assets of life insurance companies alone, which in 1920 were substantially smaller than the time and savings

CHART 19

GROSS NATIONAL PRODUCT AND THE MONEY SUPPLY



NOTE.—Total deposits adjusted and currency include demand deposits adjusted, time deposits, and currency outside banks. Deposits are for all banks in the United States. Demand deposits adjusted exclude U. S. Government deposits and interbank deposits and items in process of collection. Time deposits include deposits in Postal Savings System and in mutual savings banks.

deposits of commercial banks, are now almost twice as large. Nevertheless, the banks have contributed to the general accumulation of savings by providing facilities for and encouraging the establishment of thrift accounts, Christmas savings accounts, school savings accounts, and of course, the purchase of Defense and War Savings bonds.

TABLE XIV.—*Time deposits at all commercial banks and total resources of other selected types of financial institutions on selected dates*[1]

Type of institution	1920	1930	1935	1940	1945	1951
	In billions of dollars					
Total	26.1	58.1	53.4	64.0	96.6	143.3
Commercial banks (time deposits)	11.0	20.2	13.3	15.6	27.2	36.8
Mutual savings banks	5.6	10.2	11.0	11.9	15.9	22.8
Life insurance companies	7.3	18.9	23.2	30.8	44.8	65.7
Savings and loan associations	2.2	8.8	5.9	5.7	8.7	18.0
	Percentage distribution					
Total	100.0	100.0	100.0	100.0	100.0	100.0
Commercial banks (time deposits)	42.1	34.8	24.9	24.4	28.2	25.7
Mutual savings banks	21.5	17.6	20.6	18.6	16.4	15.9
Life insurance companies	28.0	32.5	43.4	48.1	46.4	45.8
Savings and loan associations	8.4	15.1	11.1	8.9	9.0	12.6

[1] For years prior to 1951, the data for banks are as of end of June and are taken from a preliminary tabulation of a revised series of banking statistics. The data for life insurance companies and savings and loan associations are as of end of December prior to 1951, and are estimates based mainly on published statistics. All data for 1951 are as of end of June.

At different times during the past 30 years, other factors have also affected the volume of time deposits. During the twenties, for example, the fact that time deposits increased much more than demand deposits can probably be explained both by a tendency for the public to do more saving in this form and by shift of funds from demand to time accounts. Such shifts enabled the depositor to take advantage of the higher interest returns available on this form of account and the bank to have the advantage of the lower reserve requirement on time deposits. The sharp decline in time deposits in the thirties represented in large part the use of accumulated savings during the general depression, since similar declines or slowdowns appeared in the funds saved at mutual savings banks, savings and loan associations, and insurance companies. In addition, the decline in time deposits probably reflected in part bank closings and the public distrust of banks created by the banking difficulties in the early thirties, as well as the sharp drop in the rate of interest paid on these deposits as bank lending opportunities diminished.

In the early forties time deposits increased considerably, but the rate of increase was somewhat less than in either demand or Government deposits. Factors which contributed to the declining relative importance of time deposits during this period of sharply rising incomes were the continuation of low interest rates on these deposits and the more attractive investment alternatives provided by United States savings bonds. Since 1945 time deposits have again increased substantially, due to some increases in interest rates, campaigns for thrift and savings deposits—in part to obtain funds for use in making real estate loans—and a slackening in the patriotic urge to buy savings bonds.

Interbank deposits

Prior to the Federal Reserve System, larger banks in the leading cities, through the medium of interbank deposits, performed the function of holding the ultimate reserves of the banking system. For the most part, this banking function was assumed by the Reserve System. City banks have continued to perform this function, however, for nonmember commercial banks, as well as to carry large working balances of member banks.

A number of factors have tended to diminish the functional role of interbank deposits and thus to decrease their volume in relation to total deposits. These include in particular the transferal of member bank reserves to the Federal Reserve Banks; the statutory prohibitions imposed in 1933 on the payment of interest on demand deposits (nearly all interbank deposits are of this kind) ; the development and growth of Federal Reserve check clearing and collection facilities; and the availability in the more recent years of large amounts of short-term United States Government securities.

Certain other factors have tended to sustain the volume of interbank in relation to total deposits. Among these are the growth of nonmember bank reserves placed with city correspondent banks, due in part to the growth in nonmember bank deposits; the shifting into the money centers in the middle thirties of idle funds accumulated by commercial banks as a result of a large accumulation of excess reserves at a time of slack private demand for bank credit; and the maintenance by banks generally of substantial working balances with city correspondents in return for a variety of advisory and personal services which are rendered by correspondents for member as well as nonmember banks.

Correspondent banking has come to be a less important function of some leading city banks as they have expanded and diversified their operations. On the other hand, in some regions individual banks, classified as country banks, have offered specialized correspondent banking services, and thus have come to hold relatively substantial amounts of interbank deposits. On balance, there has been a reduction in the proportion of interbank to total deposits at commercial banks as a whole; in 1951 such deposits constituted 8 percent of total deposits compared with 10 percent in 1920.

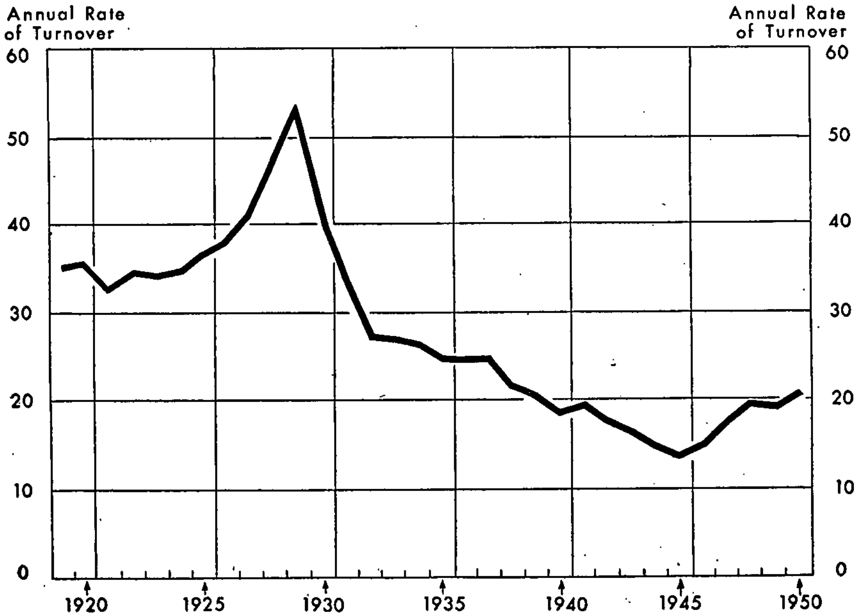
Money Transfer and Conversion Lending

The past four decades have witnessed a substantial advance in the level of economic activity, a marked population growth, and rapid industrial development in those areas, notably in the West and South, that were far removed from established financial centers. These trends have required, and to some extent have been facilitated by, improvements in the mechanism for transferring deposits, in methods of distributing currency and coin, and in the mechanisms of converting deposit balances into currency and coin. Both commercial banks and the Federal Reserve System have constantly engaged in making such improvements, and the current volume of debits to deposit accounts and of bank clearings and collections affords evidence of the increased volume of money transfers and conversions. Debits to demand and time deposits at commercial banks during 1950 totaled nearly $2 trillion, or more than three times the average volume of debits during the early twenties. It is estimated that approximately 5 billion checks were drawn upon and paid by banks in 1950.

In 1950, demand deposits turned over or were used on the average 21 times.[82] There have been wide fluctuations over the years in this rate of turnover, as is shown in Chart 20. These fluctuations have reflected changes in the volume of demand deposits as well as in the extent to which depositors used these deposits in meeting current expenditures and in consummating business and financial transactions. The highest annual turnover rate, 54, was reported in 1929, the peak year of the stock market boom.

CHART 20

ANNUAL TURNOVER OF DEMAND DEPOSITS AT ALL COMMERCIAL BANKS



Check clearance and collection

It has always been a function of the commercial banking system to arrange for the collection and payment of checks, primarily through the transfer of ownership of deposit balances. Through the establishment of correspondent relationships and of clearing house associations in the larger cities, the commercial banking system had already developed a reasonably satisfactory clearing and collection mechanism prior to the creation of the Federal Reserve System. There was, however, considerable room for improvements that would expedite clearance and collection, such as the elimination of circuitous routings of checks to avoid payment of exchange charges; the introduction of mechanized sorting, recording, and accounting procedures; speedier communication and transportation facilites; and greater centralization of clearing and collection operations.

[82] Available information indicates that time deposits turn over about once a year.

While commercial banks generally since 1920 have steadily and greatly improved their clearance methods and procedures, the establishment of the Federal Reserve System was a significant contribution to expeditious check clearance and collection throughout the country. Centralization of regional clearings and collections in Reserve Banks reduced the volume of checks in transit among individual banks and accelerated their collection, while the establishment of the Interdistrict Settlement Fund at the offices of the Board of Governors of the Federal Reserve System in Washington permitted daily interregional settlements. By requiring that all member banks remit at par for all checks sent to them by Federal Reserve Banks, the Federal Reserve Act has encouraged the elimination of exchange charges and the circuitous routing of checks to avoid payment of such charges. The number of banks which do not remit at par has declined from approximately 10,000 in 1918 to 1,800 in 1951, most of which are small. All but 2 percent of commercial bank deposits are now in banks that remit at par.

As a result of continuing modernization of clearing and collection procedures at commercial banks and Reserve Banks, and the use of speedier transportation facilities, the time of settlement has been greatly reduced over the past three and a half decades. Member banks, consequently, now receive credit in their reserve accounts for items collected through the Federal Reserve after a maximum wait of 2 days, as compared with a maximum of 8 days in earlier years.

Transfer of funds

The establishment of the Interdistrict Settlement Fund of the Federal Reserve System and the provision for daily inter-regional settlements through the Fund have made it possible for commercial banks to effect almost immediate telegraphic transfer of funds across the country for their own accounts or for the accounts of their customers. These transfers are immediately debited and credited to the deposit accounts of the transferer and transferee customers by their respective banks; and the banks' reserve accounts in turn are debited and credited on the books of the Federal Reserve Banks. In 1950 telegraphic transfers of funds through Federal Reserve facilities amounted to approximately $500 billion, and additional transfers were made over the private wire facilities of commercial banks.

Currency and coin supply

The huge till-money requirements of businesses and the pocket-money requirements of individuals are supplied directly through the commercial banks, and in this capacity the banks also handle the exchange of worn-out for new currency and serve as depositaries for excess accumulations of cash. With the growth in demand and time deposits and in the volume of currency and coin in circulation over the period 1920–50, the currency handling activities of commercial banks and the Reserve Banks have increased substantially. The Federal Reserve System, for example, received and counted 1,085 million pieces of currency, totaling $7,964 million, in 1920; by 1950, the number of pieces handled had increased to 3,846 million involving a total of $24,039 million.[83] The magnitude of these operations reflects the operation of a flexible currency system for the country as a whole—one of the primary reasons for the establishment of the System.

[83] Similar statistics are not available for commercial banks.

Banks as Suppliers of Credit

Throughout the twenties, the principal credit extension activity of commercial banks was making loans to corporations, partnerships, and individuals, on either an unsecured or a secured basis. Expansion of loans secured by stock market collateral was a noteworthy development, particularly of the latter part of this period. During World Wars I and II and following the severe depression of the early thirties, commercial banks acquired large volumes of United States Government securities. During the war years, this was primarily to help finance the Treasury deficit; during the depression of the thirties it reflected both Treasury deficit financing and the paucity of private credit demands. Since the end of World War II, there has been a sharp resurgence of commercial bank lending to individuals in their role as consumers and owners of real estate and to business enterprises, and banks have reduced their holdings of Government securities to some extent to obtain funds for private lending. These principal changes in bank credit extension activities are clearly reflected in the loans and investments of all commercial banks shown in Table XV and Chart 17.

TABLE XV.—*Loans and investments at all commercial banks on selected dates* [1]

Type of loan or investment	1914	1920	1930	1935	1940	1945	1951
	In billions of dollars						
Total loans and investments	17.3	36.9	49.4	34.8	41.2	114.6	126.0
Loans, total	13.4	28.6	35.0	15.0	17.4	23.7	[2] 54.8
Business [3]	7.1	15.7	15.8	6.8	7.9	9.3	26.8
Consumer					[4] 1.9	1.2	7.7
All other					2.0	2.0	4.3
Real estate	1.8	3.1	6.0	3.5	4.4	4.5	14.1
Security [5]	4.5	9.8	13.2	4.7	1.2	6.8	2.6
Investments, total	3.9	8.4	14.4	19.8	23.8	90.9	71.2
U. S. Government securities	.8	3.6	4.9	12.8	16.6	84.1	58.5
State and local government securities	.6	1.0	2.2	2.7	3.6	3.8	8.5
All other	2.5	3.8	7.3	4.3	3.6	3.0	4.2
	Percentage distribution						
Total loans and investments	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Loans, total	77.5	77.3	70.9	43.1	42.2	20.7	43.5
Business [3]	41.0	42.2	32.0	19.5	19.2	8.1	21.2
Consumer					[4] 4.6	1.1	6.1
All other					4.8	1.7	3.4
Real estate	10.5	8.4	12.2	10.1	10.7	3.9	11.1
Security [5]	26.0	26.5	26.7	13.5	2.9	5.9	2.1
Investments, total	22.5	22.7	29.1	56.9	57.8	79.3	56.5
U. S. Government securities	4.6	9.7	9.9	36.8	40.3	73.4	46.4
State and local government securities	3.5	2.7	4.4	7.8	8.8	3.3	6.8
All other	14.4	10.3	14.8	12.3	8.7	2.6	3.3

[1] Data are as of end of June. For years prior to 1951, they are taken from a preliminary tabulation of a revised series of banking statistics.
[2] Figures for various loan items for 1951 data are shown gross (i. e., before deduction of valuation reserves); they do not add to the total and are not entirely comparable with prior figures. Total loans continue to be shown net.
[3] Includes agricultural loans.
[4] Estimated.
[5] Prior to 1940, includes loans secured by collateral other than securities.

Bank lending to businesses [84]

From the turn of the century until the early twenties, the pattern of commercial bank lending to business remained substantially unchanged. Loans were typically made available to business on a short-term basis, consistent with the principles of working capital financing with which bank lending was largely associated. To the extent that banks financed other than the current operating needs of business, this was similarly done on a short-term basis with the paper renewed at maturity. Over this period the volume of bank loans to business expanded at about the same rate as total bank credit, with the result that business loans accounted for approximately the same proportion of total bank loans in 1922 as they did in 1914 and 1900. Up to World War I, banks held a modest but gradually growing proportion of assets in longer-term corporate securities, but over the war period, with the increase in holdings of loans and United States Government securities, this proportion declined somewhat.

Beginning in the early twenties the pattern of bank lending to business enterprises underwent considerable change: first, during the twenties as a result of changes in the manner in which business operations were financed through bank credit; second, during the depression of the thirties as a result of the greatly reduced credit demand by businesses; and third, in the post-World War II period as a result of the sharp revival of business demands for credit.

The twenties.—In the twenties changes in the character of the business population and in business financing practices modified significantly the traditional business methods of financing through banks, and the older type of short-term commercial loans, secured or unsecured, declined in relative importance. During this period, for example, the asset size of established business corporations increased on average and a somewhat larger proportion of total trade and industrial activity came to be accounted for by large and very large enterprises, partly as a result of internal growth and partly as a result of mergers and consolidations. Since these concerns are generally less dependent on short-term bank credit than smaller ones, this trend tended to retard expansion in business demand for such credit.

Changing financing practices of businesses also altered their relationships with banks as sources of short-term funds beginning in the twenties. Both banks and business enterprises remembered with concern the financial difficulties of 1920–23, which resulted in part from excessive short-term financing of commodity inventory. On the part of banks, remembrances of this experience tended to restrict somewhat their short-term lending to business. On the one hand, this tendency favored the growth of specialized financing institutions such as factors and commercial finance companies serving credit areas subject to special risk. On the other hand, it encouraged the development of cash selling by business enterprises, with such intermediaries as sales finance companies, personal finance companies and industrial banking institutions growing up to provide credit to distributors and final buyers. Since banks supplied these financing agencies as a group with a major part of their funds, the over-all

[84] In the preparation of this section, material has been drawn from the exhaustive study, Business Finance and Banking by Neil H. Jacoby and Raymond J. Saulnier, National Bureau of Economic Research, New York, 1947.

result of the development was a change in the character of bank financing of business rather than in the over-all volume of credit supplied.

Another important change in business financing practice affecting business reliance on bank credit in the twenties was a fairly consistent ability on the part of many industrial and commercial businesses to reinvest earnings. Industrial and commercial enterprises generally were quite profitable during this decade and ploughed a substantial fraction of their increasing earnings back into operations. In addition, with a buoyant market for the absorption of corporate bonds and with rising activity and prices for corporate stocks, the larger companier relied to an increasing extent on the capital market as a source of financing.

Reliance by larger enterprises on the capital market, however, did not result in a complete substitution of this source of funds for bank credit. Banks themselves, for example, bought significant amounts of corporate bonds for their own portfolios. Between 1920 and 1930 commercial bank holdings of such securities almost doubled, increasing from 3.8 to 7.3 billion dollars.

To a considerable extent, the successful flotation of stocks during the twenties, as well as the buoyancy of the bond market, depended on loans on securities obtained at banks or from brokers, who for the most part obtained their funds from banks. Both business enterprises and individuals obtained such loans, in part to finance additional security purchases, especially of stocks, and in part to finance other types of investment or even consumption. The volume of security loans at banks rose substantially in the late twenties. The liquidity of many large companies was such that they themselves also provided a large volume of stock market credit, and banks acted as agents in placing a large proportion of these funds in the stock market.

Banks contributed in still another way during the twenties to the flotation of corporate securities, namely, by the operation of security affiliates, which permitted the larger commercial banks in financial centers to participate in the underwriting and distribution of security issues. Such affiliates were considered to be an unsound combination of investment banking with deposit banking and were prohibited by the Banking Act of 1933.

Another change in the form of business borrowing from banks in the twenties was the decline in the sale by business enterprises, particularly the larger ones, of their promissory notes in the general financial market, commonly referred to as commercial paper. Such paper, which was usually issued in a negotiable form through special commercial paper houses, was customarily purchased in large amounts by commercial banks. Among the major factors in the decline of this form of external business financing were (1) the development of closer relationships between commercial banks and their business customers, (2) the effects of the establishment and growth of the Federal Reserve System in tending to make more credit directly available throughout all sections of the country at competitive interest rates, and (3) a greater reliance of large corporations on long-term security financing.

During the twenties banks facilitated the financing of foreign trade, and to a lesser extent also domestic shipping and domestic and foreign storage, through their acceptance activities. National banks were first permitted to accept bills of exchange by the Federal Reserve Act of 1913, and State banking acts were generally amended soon thereafter to permit State banks to accept bills. The acceptance activity of banks developed during the First World War and, after a decline early in the twenties, reached a peak in 1929–30. By accepting bills drawn by exporters, and thereby guaranteeing that the bills would be paid when due, the banks gave the principals in foreign trade access to a broad market for funds at relatively low rates. The Federal Reserve encouraged the development of this market in various ways, including the setting of a favorable buying rate on bankers' acceptances. The part of the Federal Reserve in the market is discussed in the reply to Question C–16. Commercial banks, especially those in New York City, also held some bankers' acceptances as investments for their own account, although their holdings represented only a small part of total acceptances outstanding.

Yet a further development that materially affected the volume of bank financing of business during the twenties was the marked increase in holdings of long-term private debt by such institutional investors as life, fire, marine, and casualty insurance companies; savings and loan associations; mutual savings banks; investment trusts; and trustees. By accepting funds from numerous individuals, including those who save only very modest amounts, these institutional investors developed a steadily growing and sizable pool of long-term investment funds. New savings were continually being added to this pool, and these, together with amounts obtained from repayments on outstanding obligations, provided an expanding flow of funds into new investment outlets, including those which represented business activities.

The treatment of business financing thus far has related to nonfarm businesses. Bank financing of the farmer also declined in the twenties. Agricultural loans of banks dropped sharply in 1921 and 1922 and during the decade as a whole declined by about one-third. This decline reflected in large part the unfavorable economic and financial influences affecting farming as compared with those affecting industrial and commercial business during the decade. Farm prices and real estate values dropped sharply in 1920 and 1921, and farm property values continued to fall thereafter, leading to many mortgage foreclosures and related distress transfers of farms. Throughout the twenties, farm prices and incomes were low relative to nonfarm prices and incomes, and the population on farms showed a steady, slow decline. One result of the unfavorable position of agriculture in the twenties was the refunding of short-term debt into real estate mortgage debt. Farm mortgage debt continued to rise into 1923.

It is impossible to appraise the full effects of all of these developments on the volume and kinds of credit extended in the twenties by banks to business. Data on classes of bank borrowers and purposes of borrowing are not available for this period. The broad breakdowns that are available indicate that the outstanding volume of bank loans to business, other than on real estate or securities, expanded little over the period. On the other hand, the amount of loans made on real estate and on the collateral of securities increased substantially over this period, and a significant proportion of these loans was probably obtained for business purposes. Also, as mentioned previously, banks invested actively in corporate bonds and expanded their loans to customers to finance the purchase or holding of corporate securities, and these bank funds became available for business financing.

The changes in bank financing of business in the twenties, on the basis of available data, may be summarized as follows: (1) the direct extension of short-term bank credit to businesses appears to have expanded less relative to general economic expansion and current price levels than in preceding periods; (2) bank financing of business tended to become somewhat more long-term in character; but (3) considering the growth in bank holdings of corporate securities, in bank financing of business through nonbank financial institutions, and in bank financing of business by loans other than short-term, working capital loans, over-all bank financing of business probably tended to expand as much relative to total bank credit expansion as a whole as in earlier periods.

The thirties.—The economic collapse of the early thirties and the unprecedented general liquidation accompanying that severe recession are fully reflected in the record of bank lending to businesses. By mid-1934 bank loans to business had declined to a level less than one-half of the peak reached in 1929. Furthermore, despite the moderate expansion of such loans that occurred during the following revival in business activity, the amount of bank credit used by business in the period 1930–40 bore a somewhat lower proportion to the total value of goods and services produced in the economy than in previous years or than was realized later in the post-World War II period.

The fact that bank lending to business during the late thirties did not recover its former relationship with business activity and with total bank credit led some observers to the conclusion that business in general had freed itself to a considerable degree of the need for credit accommodation at banks. The temptation to draw this conclusion was strengthened by the rapid increase in bank holdings of United States Government securities as a result of large Federal deficit spending to foster and accelerate economic recovery.

Strong resurgence of bank lending to businesses since World War II indicates, however, that the explanation for the low level of business credit demand at banks during the late thirties probably reflected a relatively smaller number of creditworthy enterprises, especially smaller concerns, together with a persisting low level of economic activity and prices. In the latter connection, a major influence was the overhang of idle industrial and commercial capacity, some of it still in liquidation, which, together with the background of severe price deflation and business adversity, acted as a brake on business expansion programs. In these circumstances, established businesses which succeeded in readjusting to a profitable basis of operations kept their financial requirements more closely in line with their earned depreciation allowances and retained earnings.

Bank lending to business in the thirties was also affected by a continuation of basic changes in the character of the business population and in business financing practices described earlier. Thus, at prevailing levels of industrial activity, the slack demand for bank credit in the middle and late thirties reflected more fully than that in the twenties the increased relative importance in the economy of service and public utility industries, which are less dependent on bank credit than other industries.

The acceptance activities of banks declined sharply in the thirties. This decline may be attributed primarily to the decline in foreign trade, which reflected depressed conditions both at home and abroad as well as the widespread adoption of exchange control. Although banks increased their share of the total bill market, their investments in acceptances also declined after 1932.

Finally, it was during the thirties also that direct lending, and participations in lending, to business by the Federal Government through the Reconstruction Finance Corporation and the Federal Reserve Banks began. Neither of these forms of financial aid ever achieved very significant proportions in terms of the dollar volume of loans outstanding to business concerns, but for a period in the thirties they were both substitutes for, and supplements to, credit from banks.

The credit needs of agriculture during the depression years of the thirties were met to an increasing extent by the establishment and growth of a variety of Federal farm credit organizations and their supervised agencies. Total Federally sponsored agricultural credit outstanding increased almost two billion dollars from 1930 to 1940. This increase included additional farm mortgage lending by the Federal Land Banks—as well as the newly instituted Land Bank Commissioner loans—medium-term lending by the Farm Security Administration, and short-term lending by production credit associations and the Emergency Crop and Feed Loan Office.

The decline in business demand for bank credit accommodation in the recession phase of the depression of the thirties, and its continuance at low levels in the period of the recovery, greatly increased competition for loans and encouraged many banks to adapt and improve techniques of business lending that had been developed for the most part by nonbank financing institutions. As a result, banks entered into direct competition with such intermediaries. These forms of lending took special account of the relation of the credit arrangements to the particular production and merchandising processes being financed. Among these newer techniques, four are of special significance: the term loan, the installment repayment equipment loan, the accounts receivable loan, and the loan secured by field warehouse receipts.

Term loans of banks, by making credit available for periods from one to five or more years, enable creditworthy businesses to finance the purchase of facilities, equipment, and machinery, and to expand permanent working capital with funds whose repayment is related to the capacity of the enterprise to retire debt out of funds available from operations, that is, depreciation allowances and retained earnings. Formerly such financing by banks, to the extent that they engaged in it at all, had tended to take the form of renewable short-term loans.

While the term loan is a type of loan adapted to general financing needs of a business, the installment repayment equipment loan is related to the purchase of a specific item of equipment and is usually secured by such equipment. Such loans were originally promoted by manufacturers of equipment, and most of the paper was resold or assigned to banks or finance companies by manufacturers or their distributors. Beginning with the middle thirties, however, banks increasingly participated or competed with other financing institutions in the arrangement of such financing. The installment repayment equipment loan is particularly adapted to the equipment financing needs of small- and medium-sized businesses.

Accounts receivable financing involves the purchase or assignment under formal arrangement of trade receivables and is employed in situations where there is a rapid turnover of trade accounts. Lending against field warehouse receipts involves credit extension to finance inventory warehoused on the premises of the borrower and is applicable to enterprises featuring wide seasonal swings in inventory requirements. Both types of credit extension serve to accommodate the credit needs of borrowers whose financial strength is not adequate to obtain credit of other types or on other terms. They are particularly useful financing methods in the case of smaller businesses.

The development and growth in the thirties of personal financing by commercial banks also provided some business concerns, especially small unincorporated businesses, with an additional source of short- and intermediate-term credit. This development made bank credit available to a wide segment of business that had not previously had access to this source. As banks gained experience in consumer installment lending, they extended their activities to the financing of installment paper originating in dealer sales of automobiles and other durable goods. In competing for this type of paper, they were increasingly obliged to undertake the financing of dealer floor stocks, thus adopting a pattern of credit operation closely allied to that practiced by the sales finance company.

The forties.—Bank loans to business increased sharply in the period of intense defense activity prior to this country's entrance into World War II, then declined through mid-1943, and leveled off during the remainder of the war. This was true despite the availability of a special facility whereby business loans made by banks and other financial institutions for war production purposes were guaranteed by the War or Navy Department or Maritime Commission, through the Federal Reserve Banks as fiscal agents (under Regulation V of the Board of Governors). Although loans authorized under this program totaled approximately 10.5 billion dollars, the largest amount of guaranteed credit outstanding at any one time was a little over 2 billion at the end of July 1944.

The explanation of the failure of business loans of banks to rise as much as might have been expected during the war years involves several factors. First, and perhaps most important, was the manner in which the Federal Government directly financed businesses engaged in war work. In 1941 authority was granted to the War and Navy Departments to advance up to 50 percent of the contract price of supplies or facilities. Two-fifths of these advances could be made to subcontractors participating in the completion of Government contracts. A closely connected authority was one granted to the same two Departments permitting them to make progress payments on Government contracts. Also during the war, businesses were permitted to amortize for income tax purposes, the entire cost of a plant certified as necessary for national defense, or to sell it to the Federal Government in 60 equal monthly installments. All these had the effect of increasing the volume of business funds from operations.

A second factor was the large volume of Government-owned facilities built during World War II, particularly by the Defense Plants Corporation, a subsidiary of the Reconstruction Finance Corporation. The RFC also was granted expanded war lending powers which permitted it beginning in 1940 to modify the credit standards applicable to concerns whose production was considered vital to the national welfare. As a result, through June 30, 1945, the Corporation authorized war loans to business totaling 1.2 billion dollars. The Export-Import Bank also significantly increased its financing of United States exports, and hence indirectly business enterprises, during the war years. Experience following World War II has pointed up some of the problems involved in large-scale Government ownership of facilities in wartime. One of these was that the amount realized on many of these facilities, constructed or acquired at high cost, was only a fraction of their original cost.

A third force tending to restrict business demand for bank credit during the war was the high level of business profits which, taken in conjunction with conservative dividend policies, made it possible for businesses to finance from funds retained from operations the major part of their requirements not provided for by the Government or Government guaranteed financing.

The fourth influence responsible for the low level of business loans of banks during the war was associated with the shift from civilian to military production. This shift most affected those industries which produced consumer goods whose distribution required a large volume of bank financing. The outstanding example of this effect was the curtailment of automobile production which resulted in large declines in credit extended to sales finance companies and to dealers. There were also controls over materials, equipment production, and building which limited business expenditures for nonwar purposes. Regulation of consumer credit, which helped to support the curtailment of output of consumer goods, was also a factor in reducing the volume of credit extended to consumer financing institutions and to retail trade.

Since the end of World War II, financial demands of all sectors of business have been heavy and the business paper held by banks as well as by other types of financial institutions has grown substantially. This growth, which leveled off in 1949 but was resumed sharply with the outbreak of hostilities in Korea, has reflected heavy credit demands of an expanding economy at high levels of activity as well as high and advancing prices.

Postwar business uses of funds have been mainly to pay for sharp and very large accretions to inventories, greater credit accommodations to customers, and a very large volume of spending on new plant and equipment, all at higher price levels. Many businesses undertook expansion and modernization plans which had been postponed during the war years. Altogether, business expenditures for expansion have been far in excess of funds available from operations, and business enterprises have had to rely on substantial outside financing. Thus, during the 5½ years ending in mid-1951, nonfinancial corporations obtained over 60 billion dollars from external sources, including trade suppliers, commerial banks, and the capital market. During this period, outstanding business loans of commercial banks more than doubled, from 11 to 27 billion dollars, and the relative importance of such loans increased from 42 to 48 percent of total loans and from 9 to 21 percent of total loans and investments.

Other types of private financing by banks

Among the other types of bank lending activity in the twenties, loans on real estate and loans on securities increased steadily, with security loans rising sharply in the late twenties. Both categories of loans increased as a proportion of total bank loans and investments. Real estate loans rose largely as a result of the larger volume of home and business construction in the early and middle twenties. Security loans rose mainly as a result of the stock market boom in the middle and late twenties.[85]

Real estate loans.—Outstanding real estate loans of banks fell sharply in the early thirties, reflecting the many foreclosures and bankruptcies of the time and the replacement of a substantial portion of such loans by bonds of the Home Owners' Loan Corporation and the Federal Farm Mortgage Corporation. Such loans began to rise slowly again after the mid-thirties due in part to revival in construction activity and in part to the institution of Federal insurance of residential mortgages and the further liberalization of statutory limitations on real estate loans at national banks. The amortization feature embodied in Federally insured mortgages, that is the feature requiring the repayment of the principal over the life of the mortgage, was gradually carried over by banks and other lenders into their noninsured real estate loans. This was a very significant change and increased considerably the number of home owners with access to institutional real estate financing.

After stabilizing during World War II, however, real estate loans began a very sharp rise which has continued to date. This rise has reflected in large part the pressing demand of veterans and others for homes, the broadened Federal mortgage insurance and guarantee programs, the general application of the amortized mortgage as a substitute for the single payment form of first and second mortgage real estate lending, and the widespread acceptance by banks of the amortized and insured or guaranteed type of real estate financing. In view of the statutory requirements relating the outstanding volume of real estate loans of banks to the volume of their time deposits, the sharp growth in such deposits in the post-World War II period, as discussed earlier, enabled banks to satisfy a great volume of the pressing mortgage demands. In June 1951 real estate loans of commercial banks were 11 percent of their total loans and investments, compared with an estimated 8 percent in 1920 and 12 percent in 1930.

Security loans.—Security loans also dropped abruptly in the early thirties, reflecting the sharp fall in stock prices and in stock market activity. As indicated by Table XV, these loans have never since reached sizable volume in bank portfolios, partly because of legislation enacted in the early thirties subjecting to regulation by the Federal Reserve System the lending by banks, brokers, and dealers in securities against securities listed on stock exchanges.[86] In part, the

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[85] As stated earlier, some real estate and security loans to business concerns provided funds for general business purposes. Unfortunately, such loans were not classified in reports as to either type of borrower or purpose of loan.

[86] The decline in total stock market credit was much larger than that shown by changes in bank portfolios, because the major portion of stock market credit in the late twenties was supplied by nonbank corporations.

decline in this kind of lending has also reflected a change in corporate financing practices. Debt, as distinguished from stock, financing has gained in volume, and the direct placement of debt obligations, particularly with life insurance companies, has grown sharply. This has been due in part to tax legislation and in part to the relatively low level of stock prices compared with other prices in the economy throughout most of the period since 1930.

Consumer loans.—Among the other types of lending activity engaged in by banks, the most important in dollar volume has come to be the direct financing of consumers. Prior to the late twenties, banks typically engaged in consumer financing through customary single-payment, short-term loans. In order to meet the growing competition of other financial institutions beginning in the late twenties, however, banks began to offer installment loans to consumers.

Consumer installment financing was first developed on a significant scale by durable consumer goods industries as a means for stimulating sales and by lenders making small loans to individuals in lower income groups. During the twenties this type of financing was further developed by specialized credit institutions such as sales finance companies, small loan companies, industrial banking institutions, and credit unions. These agencies, as a group, relied on commercial banks for a substantial part of their funds.

Direct consumer installment lending by banks showed especially marked growth in the thirties and subsquently became an increasingly important part of both the total amount of consumer installment credit outstanding and total bank loan portfolios. In the late thirties, many banks commenced to buy consumer installment paper from retail dealers and distributors.

Except for a slight dip in the recession of 1937–38, total consumer installment credit outstanding rose steadily from the depths of the depression of the early thirties to the advent of World War II. Thereafter, it contracted abruptly because of the reduced availability of consumer durable goods and the imposition of temporary restrictions on the terms of borrowing. Since the end of World War II, with an expanded supply of consumer goods and despite the effects of consumer credit regulation during part of the period, the volume of installment credit has risen sharply to more than double its previous peak level in 1941. This rapid rise, of course, is partially accounted for by the higher postwar price levels. By the end of 1950, installment credit extended by banks to consumers accounted for 40 percent of the total amount of consumer installment credit outstanding as contrasted with about 29 percent in 1941 and only a nominal proportion in the late twenties.

The development and growth of consumer installment lending by banks has been one of the most important additions to the credit granting function of banks since the late twenties. It has widened significantly the scope of bank activity and has brought the benefits of bank borrowing to a large and increasing number of consumers and small independent merchants and artisans. In addition, bank lending to consumers, through introducing more competition in this type of lending, has reduced the cost of credit for small borrowers. It also bolstered bank earnings considerably during the depression years of the thirties and has continued to contribute significantly to them ever since.

Bank financing of government

In addition to financing businesses and other sectors of the private economy, the commercial banking system has also provided substantial funds to the State and local governments and to the Federal Government. Since the early thirties, financing of the Federal Government has been one of the most important activities of commercial banks.

Bank holdings of State and local government securities have increased steadily since the inception of the Federal Reserve System, but particularly in the late thirties and the post-World War II years. In the thirties this was due in large part to the relatively small volume of private demands for bank credit. More recently, it has been due mainly to the added attraction of the tax-exempt feature of these securities in a period of high Federal income taxes. In June 1934, all insured commercial banks held $2.3 billion, or 7 percent of their total loans and investments, in obligations of State and local political subdivisions. Thereafter, this volume rose steadily and about in proportion with other bank credit, reaching 3.3 billion at the end of 1939 and 8.3 billion at mid-1951. On the latter date, State and local government securities still made up approximately 7 percent of the total loans and investments of all insured commercial banks.

Following establishment of the Federal Reserve System, large-scale financing of the Federal Government by the commercial banks occurred during World War I. Over the war period the Government covered about 30 percent of its total expenditures by tax receipts and the remaining 70 percent by borrowing. Of an increase in the Federal Government debt of 22½ billion dollars between mid-1917 and mid-1919, about 3½ billion, or 15 percent, was acquired by commercial banks. By the middle of 1919, commercial bank holdings of Government securities amounted to about 5 billion dollars, or 15 percent of total loans and investments. Commercial banks also assisted Government financing in World War I by lending to individuals in order that they might buy Government bonds and by directly financing business enterprises engaged in war production.

During the recession of 1920–21, commercial banks reduced their holdings of Government securities to about 3.3 billion dollars, but thereafter increased them steadily throughout the twenties to about the amount held in mid-1919. Over this entire period, the Federal Government retired 9.5 billion dollars of outstanding debt.

The second period of heavy lending to the Government by commercial banks occurred during the severe depression of the thirties. Between June 1930 and June 1941, the Federal debt increased by approximately 40 billion dollars. Commercial banks absorbed over 15 billion, or almost two-fifths of this debt increase. At the end of June 1941 the commercial banking system held over 20 billion out of a total of slightly less than 55 billion of Federal Government securities outstanding, and these 20 billion dollars of securities equaled over two-fifths of total bank loans and investments. This large increase in bank holdings of Government securities during the thirties occurred partly because of the large Government deficits of the time and partly because of the lack of alternative private investment opportunities. It also undoubtedly reflected a continuing desire for liquidity that banks developed following the difficulties they experienced in 1930–33 from their less liquid portfolios acquired in the late twenties.

World War II brought about the greatest increase in commercial bank holdings of Government securities. During the 6 years ending June 1946 the Treasury obtained nearly 395 billion dollars from all sources to finance the Government's war and other expenditures. Approximately 175 billion, or 45 percent of this amount, came from tax receipts and the remaining 220 billion, or 55 percent, from borrowing. Commercial banks supplied nearly 70 billion or about 30 percent of these borrowed funds. By mid-1946 commercial bank holdings of Government securities had reached about 85 billion or about two-thirds of their total loans and investments.

During World War II the increase in bank holdings of Government securities was equal to almost 90 percent of the increase in total bank loans and investments that occurred during the period. This was in sharp contrast to the experience during World War I when Government securities made up over 45 percent of the increase of total loans and investments.

From mid-1946 through mid-1951 commercial bank holdings of Government securities declined by about 26 billion dollars. This decrease occurred as banks allowed their Government security holdings to mature or sold them in order to obtain funds to meet the attractive and exceptionally large volume of private credit demands that arose during the postwar years. By June 1951 commercial bank holdings of Government securities had dropped to 58½ billion, or 23 percent of the 255 billion of total Federal debt outstanding, but they still made up over 45 percent of total commercial bank loans and investments.

Thus, since the early thirties banks have played a particularly vital and important role in helping to finance Government expenditures to promote recovery from one of the country's most critical depressions and also armament and military expenditures during this country's most costly war. This activity, in addition to providing an important public service, tended to maintain bank earnings during years of sparse private investment outlets, led to significant changes in the structure and character of bank assets, and gave banks a new high degree of liquidity. The additional liquidity resulting from large-scale bank purchases of Government securities during the thirties and first half of the forties created, as well as solved, problems. By selling Government securities in the post-World War II period, banks were able to provide businesses and individuals with an exceptionally large amount of credit, but this intensified the inflationary pressures of the times and added to the problems of debt management and of credit and monetary management for the Treasury and the Federal Reserve.

Service Functions

Since the establishment of the Federal Reserve System, what may be called the service functions of the commercial banking system have been expanded and improved. Among the more important of these functions are the provision of fiduciary services to the public and fiscal agency operations for the Federal Government.[87]

[87] Various bank services not discussed are: furnishing bank customers with means of settling for business transactions, such as cashiers' checks, drafts on domestic and foreign correspondents, letters of credit, and travelers' checks; purchases and sales of securities for the account of customers; safekeeping facilities; and the collection of coupons, maturing bonds and notes, and drafts.

Fiduciary services

Commercial banks have been providing a variety of fiduciary services to individuals and businesses since the 1890's. In 1913, the passage of the Federal Reserve Act gave impetus to the extension of these activities by authorizing the Federal Reserve Board to grant trust powers to national banks. Previously, national banks had not been permitted to engage in fiduciary activities. About one-half of the nearly 3,000 banks that perform fiduciary services for customers today are national banks.

The fiduciary activities of banks embrace a variety of services, chief of which are the settlement of estates, the administration of trust funds, and the management and custody of property. All of these activities vary greatly in character from bank to bank and from customer to customer, depending in part on the degree of discretionary authority granted to the bank by both the customer and the laws and regulations under which the bank operates. These variations in the nature and scope of the fiduciary activities of banks, as well as the peculiarities of fiduciary accounting practices, have been partly responsible for the lack of development of meaningful statistics on the trust business of banks.

The fiduciary activities of banks have exhibited particularly marked growth since the mid-thirties. Among the factors contributing to this growth have been the general expansion of the economy; the increase in all forms of taxes, especially estate and inheritance taxes; the growing complexity of the problems of managing wealth; the rapid rise of business pension funds; the authorization of common trust funds; and an increase in public confidence in trust institutions. The latter has resulted in part from more comprehensive regulation and supervision of the fiduciary activities of banks, including Regulation F of the Board of Governors. In part it is the cumulative effect of bank solicitation of this type of business as well as the cumulative effect of bank experience with trust activities.

Fiscal agents of the Federal Government

As a result largely of war financing and in order to facilitate the sale and redemption of securities and the collection of taxes, commercial banks have participated to an increasing extent in the fiscal operations of the Federal Government. Before the Federal Reserve System was established, such participation was confined largely to serving as depositaries for collected funds and postal savings deposits. At the present time, banks sell and redeem savings bonds; receive subscriptions for other Government securities; carry Treasury Tax and Loan accounts; and accept social security, tax withholding, and corporation income-tax payments. Several hundred banks, located generally in areas removed from Federal Reserve Banks and branches, are used by the Treasury for collecting funds. At the request of the Treasury, during World War II approximately 300 so-called bank facilities for receiving deposits and cashing checks were established at military and other Government establishments by banks in their capacity as fiscal agents. Approximately 150 facilities of this kind are in operation today.

General Summary

The commercial banks of the country are private business enterprises engaged in serving their customers—businesses, investors, consumers, and governmental units—to the best of their ability in competition with other financial organizations and agencies. In meeting their customers' needs for credit, for a convenient medium of exchange, for a convenient form in which to hold savings, and for other financial services, commercial banks perform an indispensible and dynamic role in the economic organization of society. This functioning of banks facilitates the activities of millions of producers and consumers as well as the various governmental units. It facilitates the large and continuous flow of money transactions which are involved in a money economy as the country's labor and resources are converted into goods and services and as these are moved through distribution channels to ultimate users and consumers. Accordingly, the development and expansion of the services of commercial banks are a vital part of the development and expansion of economic activity.

As free enterprise capitalism has developed, the processes of production and distribution have become more numerous and more complex and the uses of money and credit have become more pervasive through all economic groups and in all parts of the country. In consequence, the history of the lending and investing activities of the commercial banking system, of the mechanical processes through which check money is used, and of the various incidental financial services performed by commercial banks, is a record of growing usefulness of banks as well as of progressive adaptation in meeting the changing needs of the economy.

The review in this answer of the past three decades underscores the accomplishments of commercial banks during some of the most critical phases of the nation's life—two world wars and their inevitable postwar readjustments, and a very severe depression. The major changes in the activities and functions of commercial banks over the period may be briefly summarized as follows:

(1) The services of commercial banks as depositaries of the liquid resources and savings of the public have been extended to an increasing proportion of businesses, investors, and consumers, particularly those with small resources. Their role as depositaries of the liquid resources of governmental units has necessarily expanded as the importance of governmental activity in the economy has increased.

(2) Growth in total deposits was especially rapid in periods of war and postwar inflation. Contraction in deposits, notably demand deposits, was associated with business recession, especially recession accompanied by financial crisis.

(3) The many financial transactions involved in providing the nation's supply of goods and services have been carried out with increasing effectiveness as commercial banks have modernized and speeded up their facilities for the transfer of deposits from payors to payees, for distributing coin and currency, and for interchanging deposits and currency, and also as they have improved their provision of systematic records of money payments for the millions of individual depositor accounts.

(4) The transactions of businesses, investors, and consumers have been facilitated to a greater extent than formerly through more diversified credit accommodations at banks. Commercial banks have extended considerably their lending and investing activity to reach more groups, especially consumers and real estate investors in the lower income groups and the smaller businesses. This has been accomplished in large part by the development and extension of new lending techniques, including installment repayment loans to consumers, real estate investors, and businesses. These types of loans are more closely adapted to the credit capacity of specific types of borrowers.

(5) One of the most important activities of commercial banks, particularly in the depression of the thirties and World War II, has been the financing of the Federal Government. This activity has been of great importance not only to the economy in providing public funds in critical periods, but also to the banks in providing earnings and liquidity at times when opportunities for private loans and investments were scarce. It has resulted in large and lasting changes in the character of bank assets.

(6) Finally, the commercial banks have developed a much broader and more varied set of financial services which they now render to all groups in our society. Among the more important of these are fiscal agency services for governments and operations as trustees for businesses and individuals.

55. Trace the changes in the number and character of banking facilities since the establishment of the Federal Reserve System, with special emphasis on the period since the middle thirties. Cover changes in the number of banks, in the supervisory jurisdiction of banks, and in multiple office banking.

Number of banking facilities

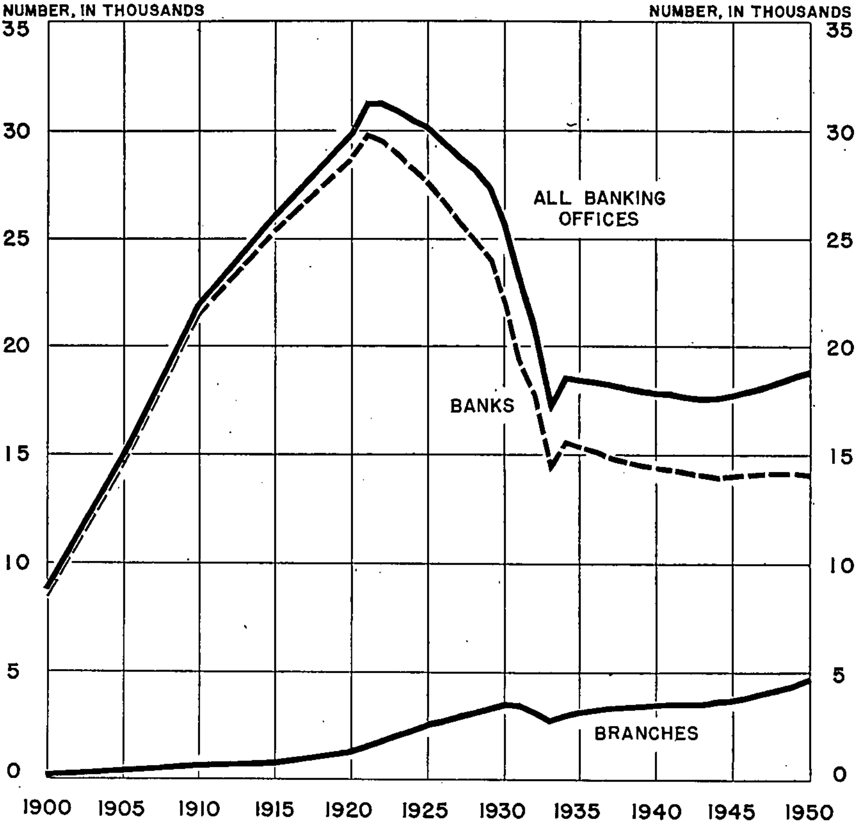
Changes prior to mid-thirties.—Important changes in both the size and the composition of the commercial banking structure of the United States have taken place since establishment of the Federal Reserve System in December 1913.[88] As is shown in Chart 21, the number of commercial banking offices continued until 1922 the rapid increase which had been in process since before the turn of the century. During the first two decades of the twentieth century, accompanying continued rapid agricultural and industrial development of a vast geographic area and rising land and commodity prices, the number of banking offices more than tripled. A peak of over 31,000 banks and branches was reached in 1922. From 1915, soon after establishment of the Federal Reserve System, to 1922 the average yearly increase was about 500 for banks and 145 for branches.

During the twenties many factors contributed to a significant decline in the number of banking offices. The rapid expansion in the preceding years had tended toward an overbanked condition in many communities; declines in farm income were reflected in deterioration of assets and lack of business in rural communities; expansion of in-

[88] A broad functional distinction is commonly made between mutual savings banks and all other banks, usually termed commercial banks. This distinction is based on the substantially different kinds of deposit business of the two groups of banks. A brief discussion of mutual savings banks follows the analyses of the commercial banking structure.

CHART 21

ALL COMMERCIAL BANKING OFFICES IN THE UNITED STATES



dustrial and financial activity in urban centers was accompanied by numerous consolidations and absorptions of banks; and improvements in roads and automobiles eliminated the need for many banking offices. These and other factors resulted in many bank suspensions, consolidations, and absorptions, which were sufficient not only to offset the large numbers of newly organized banking offices but also to decrease substantially the total number of commercial banks and branches. By 1929 the number of commercial banking offices in the United States had dropped by almost 4,000 from its 1922 peak. The number of banks decreased from about 29,000 to 24,000, but the number of branches continued to increase and there were over 3,000 in operation at the end of 1929; the average annual increase in the number of branches in the years 1923–29 was over 200.

Severe economic recession and general deflation of prices and incomes in the early thirties were attended by successive waves of bank suspensions and large numbers of consolidations and absorptions in both agricultural and industrial areas. In the period 1930–33, approximately 9,000 banks suspended operations, and over 2,300 banks disappeared as a result of consolidations and absorptions. Suspensions involved large and small banks alike and finally resulted in the banking holiday of March 1933. This action closed all banks in the country; those that reopened were permitted to do so only after the situation of each had been reviewed and found satisfactory by the supervisory authorities.

Reorganization of the country's banking structure, occasioned by the banking holiday, was virtually completed by 1935. Those banks, and their branches, that could not meet the test of soundness or anticipate early restoration to a sound operating condition had disappeared. At the end of 1935, 18,455 commercial banking offices were in operation, of which 15,299 were banks and 3,156 were branches; this reflected net declines of 8,727 banks and 197 branches from the numbers in operation at the end of 1929.

Changes after mid-thirties.—Small but successive decreases in the number of commercial banking offices occurred in the years 1936–43. By the latter year, the number in operation was 17,614 compared with 18,455 at the end of 1935; the number of banks declined from 15,299 to 14,034, while the number of branches again showed an increase, from 3,156 to 3,580.[89] The average annual decrease in the total number of commercial banking offices was 105, composed of a decrease of 158 banks and an increase of 53 branches.

The tremendous stimulus to the economy provided by the prewar defense program and this country's subsequent entry into World War II was not reflected immediately in the number of banking offices. It was not until 1944 that the total number of commercial banking offices increased—for the first time since 1922.[90] The number increased steadily from 1944 to 1950, the average annual increase being 175 banking offices.[91] Following a small decline in 1944, small increases in the number of commercial banks occurred annually from 1945 through 1947, and since then the number has decreased moderately each year. The number of branches, however, increased consistently in each of the years 1944–50, the average annual rate of increase being 163. At the end of 1950 there were in operation 18,842 commercial banking offices, comprising 14,121 banks and 4,721 branches. Of the 4,721 branches, 2,035 were located in the same city as their parent banks.

Statistics of changes in the commercial banking structure are given in Tables XVI to XX. Table XVI shows, by year and class of bank, the number of banking offices (banks and branches) in the United States. Tables XVII and XVIII show similar information for banks and branches, respectively. Table XIX shows, by year, the principal structural changes affecting the number of banks, while Table XX shows similar information for branches.

Size of commercial banks and branches

The size of commercial banking enterprises, as measured by total deposits, has increased rapidly during the past 15 years. This has

[89] Facilities at military and other Government establishments, in operation since 1942, are excluded. See footnote 1 of Table XVIII.

[90] An apparent increase in 1934 was due to the fact that statistics for that year include a large number of banks which suspended in 1933 but which reopened or were succeeded by new banks in 1934.

[91] Preliminary figures for 1951, inserted in the accompanying tables, indicate that the increase in 1951 exceeded that of 1950.

come about as a result of a fairly gradual growth in total commercial bank deposits in the late 1930's, a rapid deposit expansion during World War II in connection with bank participation in financing Government deficits, and some further growth in deposits in the post-war period.

Changes in the size of banks and branches since 1940 are due principally to the fact that increases in the money supply are in large measure reflected directly in bank deposits. The unprecedented increase in deposits during the past 15 years, largely resulting from war financing, has produced a situation where a bank that was considered fairly large in the middle thirties might well be termed small at the present time.

Bearing this in mind, the most significant change in the size of banks, as indicated by their distribution by total deposits classes, has been the great reduction in the number of very small banks. In 1935 over half of all commercial banks had deposits of less than half a million dollars; by 1940 this proportion had declined to about 40 percent and by 1950 to less than 6 percent, as is shown in Table XXI. Banks with deposits under $10 million represented about 88 percent of the total number in 1950 compared with 97 percent in 1935. Banks of the largest size (with deposits of $50 million or more) increased from under 1 percent to almost 3 percent of the total in the 15-year period.

While complete data for branches are not available, statistics for member bank branches indicate, as might be expected, that the size of branches has also increased, as is shown in Table XXII. The proportion of member bank branches with deposits of less than half a million dollars declined from about 11 to 4 percent from 1940 to 1949, while the number with deposits of $10 million or more increased from 6 to 22 percent of the total.

Supervisory jurisdiction

The existing pattern of supervisory jurisdiction over the banks of the country has developed over a long period as a result of various legislative actions. The major development has been the tremendous growth in the number of banking offices subject in some degree to Federal regulation.

Prior to 1863, chartered banks were supervised by State authorities and were subject to applicable provisions of State law. In that year, passage of the National Bank Act opened the way for creation of national banks, chartered and supervised by Federal authority, to operate side by side with the State chartered banks. A two-pronged division of banks according to chartering authority—now commonly referred to as the dual banking system—was thus inaugurated and has continued. In 1915, soon after passage of the Federal Reserve Act, there were 7,598 national banks with 26 branches and 18,277 State banks with 759 branches. The proportion of Federally chartered banks has increased somewhat; at the end of 1950 there were 4,958 national banks, over one-third of all commercial banks, as compared with a little less than 30 percent in 1915. Dollarwise, national banks held about 50 percent of all commercial bank deposits in 1915 and about 58 percent at the end of 1950. The number of branches of national banks increased during this period from 26 to 2,136, while the number of branches of State chartered banks increased from 759 to 2,585.

The Federal Reserve Act provided that all national banks become members of the System and that such State banks as wished to join and could fulfill certain requirements for membership could also become members. Thus, the category of State chartered banks was divided into members of the System and banks not members of the System. The State member banks became subject to Federal Reserve supervision, though direct and primary supervisory responsibility remained with the State chartering authorities. The number of State banks which elected to become members of the System, and qualified, increased from 17 in 1915 to 1,648 in 1922; this number was reduced to 1,001 in 1935 following readjustments caused by the banking holiday and increased to 1,915 in 1950. Although State member banks represented only about 20 percent of the number of all State commercial banks at the end of 1950, they held over 65 percent of the deposits of all State commercial banks.

The trend over the years has been for the proportion of all commercial banks accounted for by national and State bank members of the Federal Reserve System to increase. In 1915 about 30 percent of all commercial banks were members, and this proportion had increased to about 50 by the end of 1950. At that time, deposits of member banks represented over 85 percent of total deposits of all commercial banks.

Establishment of the Federal Deposit Insurance Corporation in 1933 provided that all national banks and State bank members of the Federal Reserve System participate, and that State banks not members of the System could participate upon fulfillment of certain requirements. Thus, the previous category of State banks not members of the Federal Reserve System was divided into those insured by the Federal Deposit Insurance Corporation and those not so insured. Nonmember banks which were previously supervised only by their State chartering authorities became subject also to Federal supervision by the Federal Deposit Insurance Corporation, if they chose to participate in deposit insurance and fulfilled the necessary requirements.

In all but a few States, virtually all State chartered nonmember commercial banks have availed themselves of the privilege of Federal deposit insurance. At the end of 1950, of the 14,121 commercial banks only 689 were not insured; 115 of these were unincorporated (private) banks. Total deposits of these noninsured banks aggregated less than $2 billion of the $155 billion held by all commercial banks.

Multiple office banking

Branch banking.—The right of banks to operate branches is subject to many restrictions under Federal and State law, and there have been significant regional differences in the growth of branch banking over the years as a result of various statutes.[92] Federal law concerning branch banking defers to State law with respect to the intra-State areas in which branches may be established. Thus, a national bank may not establish a branch at any point in the State unless the

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[92] For discussion of the development of the legal status of branch banking see Banking Studies, Board of Governors of the Federal Reserve System, 1941, pp. 114–117.

State law permits a State bank to do so. Moreover, there is also a Federal requirement that in order to establish even one branch outside the city of the head office, a National or State member bank must have capital stock of at least $500,000 (except in States that have a population below one million).

There has been an almost continuous increase since 1900 in the number of branches of commercial banks, and their relative importance in the banking structure has grown very substantially. From 119 branches, about 1 percent of all banking offices, in 1900, the number increased to 4,721 at the end of 1950, representing 25 percent of all banking offices. Since the end of World War II the rate of growth in the number of branches of commercial banks has been more rapid, with the result that the total number of branches has increased about 30 percent in the past 10 years.

Despite this growth in number of branches, relatively few of the country's 14,121 commercial banks operate branches. This is shown by the following figures of number of commercial banks operating branches and number of branches operated at the end of selected years:

	Number			
	1935	1939	1941	1950
Commercial banks operating branches	817	934	968	1,241
Branches operated	3,156	3,497	3,564	4,721

Provisions of law, which in most cases specify the confines within which branch banking may be conducted, have resulted in a commonly accepted measurement of branch banking in terms of geographic relationship of branches to the location of the head office. Following some liberalization around 1933 of Federal and State laws with respect to the locations in which banks could establish branches (from 1927 member banks had been specifically limited to the establishment of head-office city branches), both the number and proportion of branches outside the head office city have increased—from 1,508 or 48 percent of all branches in 1935, to 2,686 or 57 percent in 1950. Although the proportion of branches located in head-office city has declined since 1935, the number increased from 1,648 in that year to 2,035 in 1950. The following figures show, as of the end of selected years, the number of branch offices by location with respect to head office:

Location of branch	Number of branches			
	1935	1939	1941	1950
In head office city	1,648	1,624	1,613	2,035
Outside head office city but in county of head office	619	762	814	1,226
In counties contiguous to county of head office	352	462	471	634
In counties not contiguous to county of head office	537	649	666	826

Most of the banks which operate branch offices confine their activities to a relatively small number of offices. As is shown in the tabulation below, 955 of the 1,162 banks which operated branches in 1949 operated 3 or less branches; at the other end of the scale, only 8 banks operated more than 50 branches. Of the 2 banks operating more than 100 branches in 1949, 1 had 127 and the other 519 branches.

Number of branches	Number of banks with specified number of branches	
	Dec. 31, 1939	June 30, 1949 [1]
1	557	645
2	152	209
3	73	101
4	33	53
5	19	26
6-10	48	57
11-15	22	30
16-20	9	11
21-50	13	22
51-100	6	6
Over 100	2	2
	934	1,162

[1] This distribution is not available for a later date.

The dominant factor in the widely different geographic development of branch banking has been the laws of the various States. These laws vary from the extreme of prohibition of branch banking to permitting branches on a State-wide basis. Between these extremes some States permit establishment of branches only in the city of the head office, some only in the county of the head office, and others only in counties contiguous to that of the head office or other limited areas. A few States make a distinction between full-power branches (empowered to perform all banking services including making of loans) and limited-power offices (limited generally to the receipt of deposits and cashing of checks). Only this type of limited-power office exists in Arkansas, Iowa, North Dakota, and Wisconsin; [93] these offices or agencies are included in branch statistics since they are comprehended under the definition of "branch" contained in Section 5155, U. S. R. S.

The effect of State laws with respect to requirements for the establishment of branches is illustrated in Table XXIII, which shows, by States, the number of branches in selected years and the status of State laws with respect to the establishment of branches.

Group banking.—Besides branch banking, there are two other types of multiple office banking, commonly known as group banking and chain banking.

In group banking three or more independently incorporated banks (and, of course, their branches) are controlled directly or indirectly by a corporation, business trust, association, or similar organization. Group banking is not so widespread as branch banking, and its relative importance has decreased over the years, due in part to the conversion of group banks into branches. The following summarizes available information on changes in the status of group banking between the end of 1931 and 1945:

[93] In 1947, Wisconsin law was amended to prohibit the future establishment of even this type of limited office. In New Mexico also, only this type of limited-power office was permitted until 1951 when the State law was changed to permit full-power branches.

	Number		
	1931	1939	1945
Groups	97	41	33
Group banks, total	978	427	387
National	469	248	215
State member	75	44	49
Nonmember	434	135	123
Branches of group banks, total	1,219	869	861
National	831	726	718
State member	212	113	94
Nonmember	176	30	49

As the table shows, all classes of commercial banks are found in group systems, as is the case in branch banking, although the majority are national banks.

A complete survey of group banking has not been made since 1945, but reports are collected regularly covering so-called holding company affiliate groups. These are the groups that are under regulation of the Board of Governors of the Federal Reserve System pursuant to the Banking Act of 1933.[94] They include all of the leading bank groups. There are, however, other groups not subject to such regulation that include member banks and some that embrace only nonmember banks; on December 31, 1948, the largest group comprising nonmember banks had 21 banks and 32 branches.

As shown in the following table, the 20 holding company affiliate groups at the end of 1950 comprised 312 banks and 967 branches. These groups varied widely in size and geographic distribution of their banking offices. Nine of them comprised five banks or less; at the other extreme one group comprehended 75 banks in four States, and another 70 banks in seven States. Measured by number of banking offices, i. e., banks plus branches, one group operating in a single State had 102 offices (19 banks and 83 branches), while another had 671 banking offices in five States (48 banks and 623 branches).

	Number	
	Dec. 31, 1946	Dec. 31, 1950
Holding company affiliate groups	22	20
Banks in such groups	320	312
Branches of banks in such groups	907	967

The existence of group banking in several States where branch banking is prohibited or severely restricted indicates that it is in some degree a substitute for branch banking; in fact, upon the enactment of enabling State legislation in the early thirties, a number of group systems converted into branch systems. However, group banking coexists with branch banking in some States, due in general to the fact that the groups operate in two or more States or because there are statutory restrictions on the areas in which branches may be established.

[94] For a brief history of the background and development of holding company legislation, see Banking Studies, Board of Governors of the Federal Reserve System, 1941, pp. 131–133.

Chain banking.—Chain banking, the third type of multiple-office banking, is similar to group banking except that chain banks are controlled in one manner or another by one or more individuals, rather than by a corporation or similar organization. It is in some cases very difficult to determine whether or not a given bank is part of a chain system, and the following are the best available data on changes in this type of multiple office between the end of 1931 and 1945.[95]

	Number		
	1931	1939	1945
Chains	176	96	115
Chain banks, total	908	424	522
National	336	170	205
State member	23	28	50
Nonmember	549	226	267
Branches of chain banks	101	75	74

The great majority of the chains comprised five or less banks. At the end of 1945, however, there was 1 chain with 40 banks and 6 branches, operating in 5 States; another with 19 banks and 8 branches, all in 1 State (most of the banks in this chain have since been converted into branches of the "key" bank); and a third with 17 banks, all in 1 State.

As noted in the cases of branch and group banking, all classes of banks are found in chain systems. Chain banking is concentrated to a large extent in a few States in which branch banking is prohibited. Over one-half of the chain banks in 1945 were in seven States—Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, and Texas; six of these States prohibit branch banking and the other strictly limits its growth.

Mutual savings banks

The foregoing analysis has been confined to so-called commercial banks, a category which by common usage comprehends all banks other than mutual savings banks. Mutual savings banks for all practical purposes carry only savings and other time deposits, whereas commercial banks as a group carry primarily checking accounts and other deposits subject to withdrawal on demand and secondarily some savings and time deposits. Because of this broad functional distinction, and their concentration in a few States, mutual savings banks are usually treated separately in analyses of changes in the banking structure.

At the end of 1950 there were 529 mutual savings banks with total deposits of 20.0 billion dollars, as compared with 14,121 commercial banks with total deposits of 155.3 billion dollars, of which 37.0 billion was saving and other time deposits.

The number of mutual savings banks, located for the most part in the Northeastern States, has shown no wide variation since 1915; a long-term downward trend of modest proportions, reflecting mergers and liquidations, is discernible. In 1915, there were 636 mutual savings banks, in 1933 the number was 579, and by 1950 the number had

[95] No survey has been made since 1945.

declined to 529. The number of branches of mutual savings banks, however, increased from about 125 in 1933 to 213 in 1950, more than offsetting the decrease in the number of banks.

Of the 529 mutual savings banks in existence at the end of 1950, 3 were members of the Federal Reserve System and 191 others were insured by the Federal Deposit Insurance Corporation. The 194 insured mutual savings banks had deposits of $14 billion and operated 152 branches, and the 335 noninsured mutual savings banks had deposits of $6 billion and operated 61 branches. Additional statistics for mutual savings banks are included in Tables XVI–XVIII.

TABLE XVI.—*Total number of banking offices (banks and branches) in the United States, by class of bank, 1900–51* [1]

Year [2]	All banking offices	Commercial bank offices							Mutual savings offices		
		Total	Member banks			Nonmember banks			Total	Insured [5]	Noninsured
			Total [3]	National	State [4]	Total [4]	Insured [5]	Noninsured			
1900	(6)	8,857	--------	3,736	5,121		--------	--------	(6)	--------	--------
1905	(6)	15,032	--------	5,669	9,363		--------	--------	(6)	--------	--------
1910	(6)	22,034	--------	7,150	14,884		--------	--------	(6)	--------	--------
1915	(6)	26,660	(6)	7,624	19,036		--------	--------	(6)	--------	--------
1920	(6)	30,368	(6)	8,088	22,280		--------	--------	(6)	--------	--------
1921	(6)	31,243	(6)	8,222	23,021		--------	--------	(6)	--------	--------
1922	(6)	31,259	(6)	8,384	22,875		--------	--------	(6)	--------	--------
1923	(6)	30,931	(6)	8,383	22,548		--------	--------	(6)	--------	--------
1924	(6)	30,482	(6)	8,299	22,183		--------	--------	(6)	--------	--------
1925	(6)	30,163	(6)	8,366	21,797		--------	--------	(6)	--------	--------
1926	(6)	29,454	(6)	8,327	21,127		--------	--------	(6)	--------	--------
1927	(6)	28,714	(6)	8,482	20,232		--------	--------	(6)	--------	--------
1928 [7]	(6)	28,106	(6)	8,563	19,543		--------	--------	(6)	--------	--------
1929	(6)	27,379	(6)	8,398	18,981		--------	--------	(6)	--------	--------
1930	(6)	25,694	(6)	8,075	17,619		--------	--------	(6)	--------	--------
1931	(6)	22,842	(6)	7,478	15,364		--------	--------	(6)	--------	--------
1932	(6)	20,997	(6)	7,231	13,766		--------	--------	(6)	--------	--------
1933	17,940	17,236	8,092	6,275	1,817	9,144	--------	--------	704	--------	--------
1934	19,196	18,491	8,666	6,705	1,961	9,825	(6)	(6)	705	(6)	(6)
1935	19,153	18,455	8,668	6,715	1,953	9,787	8,562	1,225	698	67	631
1936	19,066	18,373	8,755	6,723	2,032	9,618	8,440	1,178	693	67	626
1937	18,927	18,236	8,820	6,745	2,075	9,416	8,342	1,074	691	67	624
1938	18,774	18,084	8,829	6,723	2,106	9,255	8,226	1,029	690	64	626
1939	18,663	17,980	8,882	6,705	2,177	9,098	8,099	999	683	75	608
1940	18,561	17,875	9,027	6,683	2,344	8,848	7,892	956	686	84	602
1941 [8]	18,524	17,841	9,199	6,682	2,517	8,645	7,742	903	683	84	599
1942	18,392	17,709	9,270	6,652	2,618	8,442	7,599	843	683	91	592
1943	18,295	17,614	9,331	6,613	2,718	8,286	7,470	816	681	279	402
1944	18,307	17,624	9,438	6,614	2,824	8,189	7,406	783	683	291	392
1945	18,419	17,734	9,586	6,658	2,928	8,151	7,380	771	685	293	392
1946	18,644	17,946	9,739	6,728	3,011	8,210	7,458	752	698	306	392
1947 [9]	18,975	18,271	9,908	6,822	3,086	8,366	7,516	850	704	318	386
1948	19,164	18,450	10,050	6,904	3,146	8,403	7,577	826	714	325	389
1949	19,371	18,641	10,192	6,987	3,205	8,452	7,672	780	730	333	397
1950	19,584	18,842	10,352	7,094	3,258	8,493	7,752	741	742	346	396
1951 p	19,843	19,083	10,533	7,183	3,350	8,553	7,862	691	760	367	393

p Preliminary.

[1] This table is a combination of Tables XVII (banks) and XVIII (branches). See footnote 1 to those tables.

[2] See footnote 2 to Tables XVII and XVIII.

[3] See footnote 3 to Tables XVII and XVIII.

[4] See footnote 4 to Tables XVII and XVIII.

[5] See footnote 5 to Tables XVII and XVIII.

[6] Not available.

[7] See footnote 7 to Table XVII.

[8] See footnote 8 to Table XVII.

[9] See footnote 9 to Table XVII and footnote 7 to Table XVIII.

TABLE XVII.—*Number of banks in the United States, by class of bank, 1900–1951* [1]

Year [2]	All banks	Commercial banks							Mutual savings banks		
		Total	Member banks			Nonmember banks			Total	Insured [5]	Noninsured
			Total [3]	National	State [4]	Total [4]	Insured [5]	Noninsured			
1900	([6])	8,738		3,731	5,007				([6])		
1905	([6])	14,682		5,664	9,018				([6])		
1910	([6])	21,486		7,138	14,348				([6])		
1915	26,511	25,875	7,615	7,598	17	18,260			636		
1920	29,715	29,087	9,399	8,025	1,374	19,688			628		
1921	30,419	29,788	9,745	8,150	1,595	20,043			631		
1922	30,086	29,458	9,892	8,244	1,648	19,566			628		
1923	29,505	28,877	9,774	8,179	1,595	19,103			628		
1924	28,806	28,185	9,587	8,043	1,544	18,598			621		
1925	28,257	27,638	9,489	8,048	1,441	18,149			619		
1926	27,367	26,751	9,260	7,906	1,354	17,491			616		
1927	26,416	25,800	9,034	7,759	1,275	16,766			616		
1928 [7]	25,579	24,968	8,837	7,629	1,208	16,131			611		
1929	24,633	24,026	8,522	7,403	1,119	15,504			607		
1930	22,773	22,172	8,052	7,033	1,019	14,120			601		
1931	19,970	19,375	7,246	6,368	878	12,129			595		
1932	18,394	17,802	6,816	6,011	805	10,986			592		
1933	15,029	14,450	6,011	5,154	857	8,439			579		
1934	16,063	15,484	6,442	5,462	980	9,042	7,699	1,343	579	68	511
1935	15,869	15,299	6,387	5,386	1,001	8,912	7,734	1,178	570	56	514
1936	15,667	15,102	6,376	5,325	1,051	8,726	7,592	1,134	565	56	509
1937	15,387	14,824	6,341	5,260	1,081	8,483	7,451	1,032	563	56	507
1938	15,194	14,639	6,338	5,224	1,114	8,301	7,318	983	555	48	507
1939	15,034	14,483	6,362	5,187	1,175	8,121	7,172	949	551	51	500
1940	14,895	14,344	6,486	5,144	1,342	7,858	6,952	906	551	53	498
1941 [8]	14,825	14,277	6,619	5,117	1,502	7,661	6,810	851	548	52	496
1942	14,680	14,134	6,679	5,081	1,598	7,458	6,667	791	546	56	490
1943	14,579	14,034	6,738	5,040	1,698	7,299	6,535	764	545	184	361
1944	14,535	13,992	6,814	5,025	1,789	7,181	6,452	729	543	192	351
1945	14,553	14,011	6,884	5,017	1,867	7,130	6,416	714	542	192	350
1946	14,585	14,044	6,900	5,007	1,893	7,147	6,457	690	541	191	350
1947 [9]	14,714	14,181	6,923	5,005	1,918	7,261	6,478	783	533	194	339
1948	14,703	14,171	6,918	4,991	1,927	7,256	6,498	758	532	193	339
1949	14,687	14,156	6,892	4,975	1,917	7,267	6,540	727	531	192	339
1950	14,650	14,121	6,873	4,958	1,915	7,251	6,562	689	529	194	335
1951 [p]	14,618	14,089	6,840	4,939	1,901	7,252	6,602	650	529	202	327

[p] Preliminary.
[1] Figures exclude those unincorporated or "private" banks not reporting to State banking authorities, except as noted in footnote 7 of this table. Banks in United States possessions are excluded except for 1 national bank in Alaska, which was a member of the Federal Reserve System from the time it opened for business in April 1915 until it was placed in voluntary liquidation in April 1921.
[2] For 1914–22, figures are as of June; for remaining years, as of December.
[3] The Federal Reserve System was established in December 1913.
[4] The figures for 1900–1910 comprise all State-chartered banks, except mutual savings banks for which the data are not available.
[5] Federal deposit insurance began Jan. 1, 1934.
[6] Not available.
[7] Beginning with 1928 the figures previously published have been revised to include certain large private banks which did not report to State banking authorities until 1934.
[8] Beginning in 1941 the member bank figures and the insured mutual savings bank figures *both* include 3 member mutual savings banks which became members of the Federal Reserve System during 1941. These banks are *not* included in the total for "commercial banks" and are included only once in the total for "all banks."
[9] As of June 30, 1947, the series was revised to conform (except that it excludes possessions) to the number of banks in the revised all bank series announced in November 1947 by the Federal bank supervisory authorities. The revision resulted in a net addition of 115 banks and 9 branches.

TABLE XVIII.—*Number of branches in the United States, by class of bank, 1900–51* [1]

Year [2]	All branches	Commercial bank branches							Mutual savings bank branches		
		Total	Member			Nonmember			Total	Insured [5]	Noninsured
			Total [3]	National	State [4]	Total [4]	Insured [5]	Noninsured			
1900	(6)	119	--------	5	114		--------	--------	(6)	--------	--------
1905	(6)	350	--------	5	345		--------	--------	(6)	--------	--------
1910	(6)	548	--------	12	536		--------	--------	(6)	--------	--------
1915	(6)	785	(6)	26	759		--------	--------	(6)	--------	--------
1920	(6)	1,281	(6)	63	1,218		--------	--------	(6)	--------	--------
1921	(6)	1,455	(6)	72	1,383		--------	--------	(6)	--------	--------
1922	(6)	1,801	(6)	140	1,661		--------	--------	(6)	--------	--------
1923	(6)	2,054	(6)	204	1,850		--------	--------	(6)	--------	--------
1924	(6)	2,297	(6)	256	2,041		--------	--------	(6)	--------	--------
1925	(6)	2,525	(6)	318	2,207		--------	--------	(6)	--------	--------
1926	(6)	2,703	(6)	421	2,282		--------	--------	(6)	--------	--------
1927	(6)	2,914	(6)	723	2,191		--------	--------	(6)	--------	--------
1928	(6)	3,138	(6)	934	2,204		--------	--------	(6)	--------	--------
1929	(6)	3,353	(6)	995	2,358		--------	--------	(6)	--------	--------
1930	(6)	3,522	(6)	1,042	2,480		--------	--------	(6)	--------	--------
1931	(6)	3,467	(6)	1,110	2,357		--------	--------	(6)	--------	--------
1932	(6)	3,195	(6)	1,220	1,975		--------	--------	(6)	--------	--------
1933	2,911	2,786	2,081	1,121	960	705	--------	--------	125	--------	--------
1934	3,133	3,007	2,224	1,243	981	783	(6)	(6)	126	(6)	(6)
1935	3,284	3,156	2,281	1,329	952	875	828	47	128	11	117
1936	3,399	3,271	2,379	1,398	981	892	848	44	128	11	117
1937	3,540	3,412	2,479	1,485	994	933	891	42	128	11	117
1938	3,580	3,445	2,491	1,499	992	954	908	46	135	16	119
1939	3,629	3,497	2,520	1,518	1,002	977	927	50	132	24	108
1940	3,666	3,531	2,541	1,539	1,002	990	940	50	135	31	104
1941	3,699	3,564	2,580	1,565	1,015	984	932	52	135	32	103
1942	3,712	3,575	2,591	1,571	1,020	984	932	52	137	35	102
1943	3,716	3,580	2,593	1,573	1,020	987	935	52	136	95	41
1944	3,772	3,632	2,624	1,589	1,035	1,008	954	54	140	99	41
1945	3,866	3,723	2,702	1,641	1,061	1,021	964	57	143	101	42
1946	4,059	3,902	2,839	1,721	1,118	1,063	1,001	62	157	115	42
1947 [7]	4,261	4,090	2,985	1,817	1,168	1,105	1,038	67	171	124	47
1948	4,461	4,279	3,132	1,913	1,219	1,147	1,079	68	182	132	50
1949	4,684	4,485	3,300	2,012	1,288	1,185	1,132	53	199	141	58
1950	4,934	4,721	3,479	2,136	1,343	1,242	1,190	52	213	152	61
1951 p	5,225	4,994	3,693	2,244	1,449	1,301	1,260	41	231	165	66

p Preliminary.

[1] Branches are defined to comprehend all branches or additional offices of banks at which deposits are received, checks paid, or money lent. However, from their inception in 1942, figures exclude banking facilities, military and other Government establishments provided through arrangements made by the Treasury Department with banks designated as depositaries and financial agents of the Government.

[2] For years prior to 1924 the figures are not for any uniform month. For 1924 andf or 1927–31 they are as of June; for 1925–26 and for 1932–50, as of December.

[3] The Federal Reserve System was established in December 1913.

[4] The figures for 1900–32 comprise all branches ofState-chartered banks except mutual savings banks for which the data are not available. Branches of unincorporated (private) banks not reporting to State banking authorities are excluded prior to 1934.

[5] Federal deposit insurance began Jan. 1, 1934.

[6] Not available.

[7] As of June 30, 1947, the series was revised to conform (except that it excludes possessions) to the number of banks in the revised all-bank series announced in November 1947 by the Federal bank supervisory authorities. The revision resulted in a net addition of 115 banks and 9 branches.

TABLE XIX.—*Major structural changes affecting number of commercial banks, 1924–51* [1]

Year	Increases		Decreases		
	New banks	Reopenings of suspended or unlicensed banks	Suspensions	Consolidations and absorptions [2]	Voluntary liquidations
1921	472	93	461	305	48
1922	409	118	343	394	35
1923	458	68	623	329	51
1924	383	108	738	373	80
1925	403	81	579	363	59
1926	345	160	924	462	75
1927	296	127	636	567	57
1928	252	53	479	534	71
1929	235	69	628	636	57
1930	153	155	1,292	769	68
1931	105	275	2,213	798	99
1932	93	279	1,416	433	101
1933	323	697	3,891	322	89
1934	511	752	44	231	104
1935	101	87	34	160	91
1936	62	16	43	176	56
1937	62	6	58	186	56
1938	39	2	52	100	68
1939	30		41	119	37
1940	32	2	22	96	49
1941	53		8	59	40
1942	22	1	9	89	69
1943	49		4	86	61
1944	69		1	72	35
1945	118			79	18
1946	144			93	16
1947	111		1	84	11
1948	80			75	12
1949	72		4	77	12
1950	68		1	91	12
1951 p	62		3	82	11

p Preliminary.
[1] Available information does not permit an exact reconcilement of the changes in the number of commercial banks during the earlier years with the number reported in operation at the end of each year in Table XVII. The principal reason is that in these years statistics collected on changes in commercial banks excluded private (unincorporated) banks, although such banks are included to some extent in the figures for commercial banks shown elsewhere. One relatively unimportant factor not included in this table is conversions of private banks to commercial banks and conversions of commercial banks to private banks. This factor has been insignificant since 1934 because the number of private banks has been very small.
[2] Includes banks converted into branches. This does not affect the total number of banking offices.

TABLE XX.—*Major structural changes affecting number of branches of commercial banks, 1938–51* [1]

Year	Increases		Decreases—Branches discontinued
	De novo branches	Banks converted into branches	
1938	49	40	56
1939	47	47	49
1940	43	43	51
1941	51	18	36
1942	28	27	50
1943	22	24	43
1944	37	33	17
1945	65	41	15
1946	142	54	17
1947	146	55	21
1948	151	56	18
1949	158	58	11
1950	179	71	19
1951 p	234	58	22

p Preliminary.
[1] Data not available prior to 1938.

TABLE XXI.—*Cumulative percentage distribution of the number of commercial banks, by size of total deposits*

Banks grouped by size of total deposits	Dec. 31, 1935	June 30, 1941	Dec. 31, 1950
Under $500,000	54.4	41.2	5.9
Under $1,000,000	73.4	63.4	20.3
Under $2,000,000	85.8	79.8	44.1
Under $5,000,000	94.3	91.6	74.3
Under $10,000,000	97.1	95.6	87.6
Under $50,000,000	99.3	98.9	97.4
Total	100.0	100.0	100.0

TABLE XXII.—*Cumulative percentage distribution of the number of branches, by the size of their total deposits*

Branches grouped by size of total deposits	June 30, 1940, member bank branches	June 30, 1949	
		Member bank branches	All commercial bank branches
Under $500,000	11.2	4.2	7.6
Under $1,000,000	31.9	8.5	16.7
Under $5,000,000	86.5	50.6	58.7
Under $10,000,000	94.3	77.8	81.6
Total	100.0	100.0	100.0
Unclassified (number of branches) [1]	204	345	835

[1] Branches that did not report deposits.

TABLE XXIII.—*Number of branches of commercial banks in the United States, selected years, and status of State law on branch banking* [1]

State	Number of branches				Status of State laws on branch banking, 1951 [2]
	1920 (June)	1930 (June)	1940 (December)	1950 (December)	
Alabama	20	17	20	24	Limited areas.
Arizona	21	27	26	54	State-wide.
Arkansas	6	3	15	18	Limited areas.[3]
California	179	853	848	955	State-wide.
Colorado				1	Prohibited.
Connecticut			16	50	State-wide.
Delaware	16	12	13	20	Do.
District of Columbia	4	25	30	41	Do.
Florida	2		3	1	Prohibited.
Georgia	25	39	25	38	Limited areas.
Idaho			37	55	State-wide.
Illinois					Prohibited.
Indiana	3	9	67	108	Limited areas.
Iowa			156	164	Limited areas.[3]
Kansas					Prohibited.
Kentucky	1	31	29	40	No legislation.
Louisiana	80	108	54	76	Limited areas.
Maine	32	65	58	70	State-wide.
Maryland	59	114	80	113	Do.
Massachusetts	45	128	115	177	Limited areas.
Michigan	218	435	162	238	Do.
Minnesota		6	6	6	Prohibited.
Mississippi	24	25	43	66	Limited areas.
Missouri					Prohibited.
Montana					Limited areas.
Nebraska	2	2	2	2	Prohibited.
Nevada			10	18	State-wide.
New Hampshire	1	1	2	2	No legislation.
New Jersey	21	103	118	162	Limited areas.
New Mexico	5	3	7	13	Do.[4]
New York	229	732	646	777	Do.
North Carolina	46	84	127	216	State-wide.
North Dakota			21	22	Limited areas.[3]
Ohio	106	264	173	224	Do.
Oklahoma					No legislation.
Oregon	1	1	67	102	State-wide.
Pennsylvania	36	177	95	190	Limited areas.
Rhode Island	14	34	38	60	State-wide.
South Carolina	15	71	22	48	Do.
South Dakota			38	48	Do.
Tennessee	31	69	51	94	Limited areas.
Texas					Prohibited.
Utah			12	23	State-wide.
Vermont		10	12	11	Do.
Virginia	20	60	72	103	Do.
Washington	10	5	85	140	Do.
West Virginia			1		Prohibited.
Wisconsin	9	9	129	151	Do.[3]
Wyoming					No legislation.
United States	1,281	3,522	3,531	4,721	

[1] Some State laws make a distinction between branches and certain other types of additional offices. This table, however, covers all branches or additional offices within the meaning of sec. 5155 U. S. R. S., which defines the term "branch" as "any branch bank, branch office, branch agency, additional office, or any branch place of business * * * at which deposits are received, or checks paid, or money lent." However, the table excludes banking facilities at military and other Government establishments. (See footnote 1 to Table XVIII.)

[2] The designations opposite each State indicate the maximum area in which branches may be established. From summary of State laws on branch banking as of July 1, 1951, compiled by the Board of Governors of the Federal Reserve System.

[3] Only offices, agencies, or stations for limited purposes as distinguished from branches are permitted under certain circumstances. Prior to May 1947 this type of branch banking was permitted in Wisconsin.

[4] Prior to 1951, only agencies for limited purposes were permitted in New Mexico. Current law permits full-power branches in limited areas.

56. Trace the course of the earnings and expenses of all member banks from the first year (1919) for which such data are available to the present time. Cover especially the following points: (*a*) the gross amounts of earnings and expenses and of current net earnings and net profits; (*b*) the ratios of current net earnings and of net profits to total capital accounts; (*c*) changes in the relative importance of different sources of earnings, especially (i) loans, (ii) investments other than United States securities, (iii) United States securities, and (iv) service charges—distinguish as far as possible between current earnings and profits and losses on sales or disposition of securities; (*d*) changes in the relative importance of different categories of expenses, especially (i) wages and salaries, (ii) interest on time deposits and borrowed money, (iii) taxes, and (iv) deposit insurance assessments—this may be estimated if this item was not shown separately in bank earnings reports.

Variations in the earnings and expenses of member banks during the past three decades have reflected both the general economic fluctuations during the period and the adaptations of the banking system to changing financial needs, markets, and laws.

The interactions of these forces resulted in wide variations in profitability over these decades as well as fundamental changes in the sources of earnings and expenses. A persistent downward drift in the level of interest rates resulted in pressure on bank earnings that was offset only by the tremendous expansion of earning assets, new sources of earnings, and a reduction in interest paid on deposits. Earnings on loans represented the most important source of earnings throughout most of the period, but varied in importance between 65 and 28 percent of total earnings. As a result of the methods used to finance the huge expenditures of World War II, Government securities became the most important source of bank earnings for a number of years prior to 1947. Throughout the entire period the return per annum on capital accounts for all active member banks, as shown in Table XXVI, varied between *average profits* of 10.9 percent and *average losses* of 7.3 percent.[96]

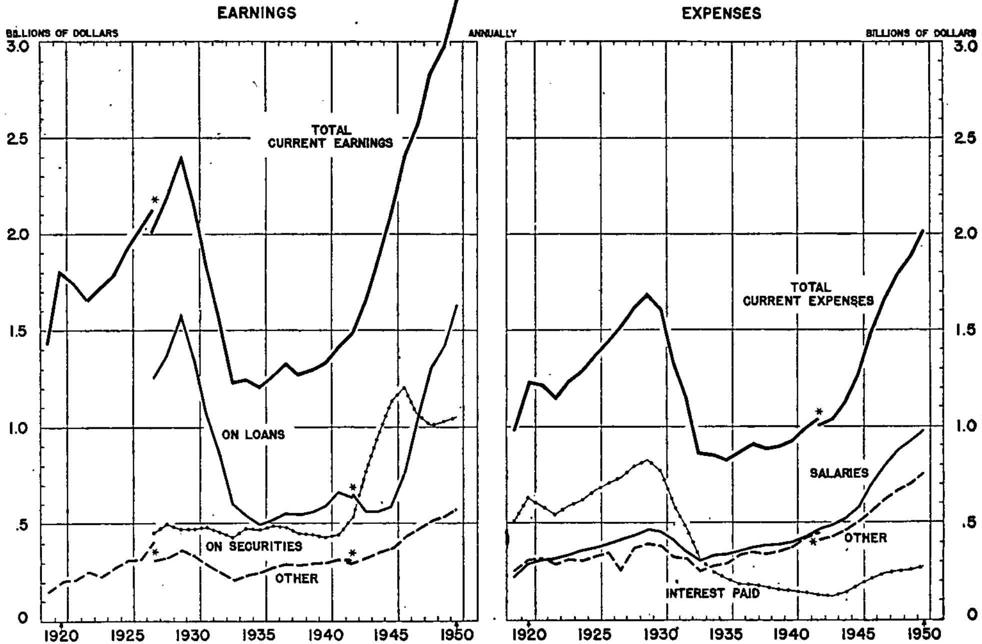
In the following discussion the important developments and changes in bank earnings are described by periods having broadly consistent economic characteristics: the prosperous twenties, the general depression and recovery in the thirties, and the war and postwar periods of the forties. Charts 22 and 23 (and the accompanying Tables XXIV–XXVI) indicate in greater detail the extent and nature of the changes for the entire period. The figures used throughout are averages for all active member banks; in each year earnings and profits of individual banks varied widely from these averages. With the exception of a few references to differences by region or by class of bank, this analysis is concerned only with data for all member banks.

The prosperous twenties, 1919–29.—Aggregate earnings of member banks in the twenties reflect a period of general prosperity, except for agriculture, characterized by moderate fluctuations in business activity. Analysis of the course of earnings and expenses starts appropriately

[96] Capital accounts comprise capital stock, surplus, undivided profits, and capital reserves, as shown in reports of condition. The ratios do not reflect losses sustained by banks placed in receivership.

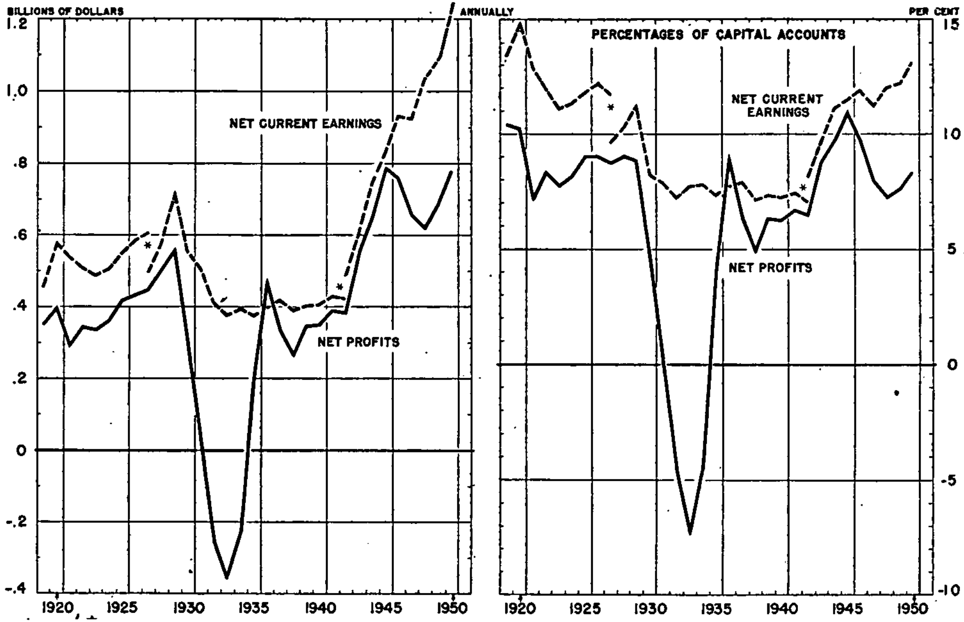
CHART 22

MEMBER BANK EARNINGS AND EXPENSES



* Current earnings do not include recoveries, profits on securities sold, etc., except that prior to 1927 profits on securities sold are included in "other earnings". Beginning in 1942, "service charges and fees on loans", formerly included in "other earnings", are included in earnings on loans. Current expenses do not include losses, charge-offs, etc.; beginning in 1942, they exclude taxes on net income but include recurring depreciation.

CHART 23
MEMBER BANK EARNINGS AND PROFITS



* Prior to 1927 profits on securities sold are included in "other earnings". Beginning in 1942, current expenses exclude taxes on net income but include recurring depreciation.

Note.— Net current earnings are total earnings from current operations less current operating expenses. Net profits are net current earnings plus recoveries, profits on securities, etc., and less losses, charge-offs, and taxes on net income. Capital accounts consist of all forms of capital including capital notes and debentures, surplus, undivided profits, and reserves for contingencies. Capital account figures used for ratios are averages of call report figures during year.

with 1919, the first year after World War I, although during the period 1919–21 economic developments were dominated by postwar readjustments.

Earnings on loans in 1919 accounted for about 65 percent of all earnings of member banks, and United States Government and other securities accounted for only about 12 and 10 percent, respectively. The largest item of expense was interest paid on deposits, which amounted to 29 percent of total earnings. Salary and wage payments used only about 16 percent of total earnings. In that year net profits of member banks totaled 351 million dollars, a return of 10.4 percent on total capital accounts.

The sharp decline in security and commodity prices during 1920 and 1921 was reflected in large losses on loans and securities and in a decline in bank earnings. Net profits of member banks declined to 293 million dollars in 1921, and the return on total capital declined to 7.1 percent.

By 1923 an upward trend in both earnings and expenses was under way that continued almost without interruption until 1929. This trend, however, was not immediately reflected in all regions, as the agricultural depression of this period greatly reduced the earnings and profits of banks in certain areas and many banks in agricultural regions failed.

Earnings on loans continued to account for the largest part of the dollar increase in the earnings of all member banks during the latter part of the twenties and reflected both a larger volume of loans and portfolio shifts toward higher yielding loans. Loans on securities, which were only about 26 percent of total loans in 1922, rose to 39 percent in 1929, and real estate loans which were 8 percent of total loans in 1922 amounted to 12 percent in 1929. Although the volume of other loans (primarily business loans) remained practically unchanged during this period, they declined as a proportion of total loans from 65 to 49 percent.

The increase during the twenties in the amount earned on securities reflected primarily the increase in holdings of securities other than United States Government. Bank earnings from United States Government securities remained practically unchanged.

Expansion of the functions of commercial banks during this period also contributed to the increase in earnings. Earnings from miscellaneous sources increased from 10 percent of total earnings in 1919 to 15 percent in 1929. Although a breakdown of this item is not available, a number of banking changes contributed to the increase; among these were the development of trust departments, investment affiliates, and foreign branch facilities, and increases in service charges.

The increase in total expenses during the twenties was accompanied by a number of changes in the relative importance of various types of expenses. Salaries and wages, which were only about 16 percent of total earnings in 1919, were 19 percent in 1929, and interest on deposits (both demand and time) increased during the same period from 29 to 32 percent. The increased importance of this expense item reflected the intensity of the competition for deposits and the relatively larger increase in time deposits than in demand deposits.

Expansion in total earnings and favorable developments in noncurrent items, particularly profits on securities sold, resulted in a steady increase in net profits during the latter part of the twenties. Net profits of all member banks increased from 337 million dollars in 1923 to 557 million in 1929. A similar rate of growth in capital, however, kept this increase from being reflected in a higher rate of return on bank capital; the ratio of net profits to total capital accounts during this period ranged between 8 and 9 percent.

General depression and banking crisis in the early thirties, 1930–34.—The break in stock and bond prices and the cumulative business contraction affected adversely the bank earnings picture during this period. Although net current earnings declined sharply from the peak in 1929, bank profits were affected principally by charge-offs necessitated by actual or expected losses. Annual losses and charge-offs during 1931–34 averaged over 50 percent of total earnings and reached 70 percent of earnings in 1933 and 1934. Even these figures do not adequately reflect the extent of the losses during this period, as many banks suspended and the losses of these banks were not included in official statistics.

Violent readjustments during this period were also reflected in the general pattern of bank earnings and expenses. Earnings on loans, which had accounted for 65 percent of total earnings in 1929, declined to 43 percent in 1934. This reflected both a large decrease in the volume of loans of all types and a decline in the rates of interest received. Dollar earnings on securities remained practically unchanged throughout the period but, as a result of the sharp decline in earnings on loans, they increased in relative importance from 20 percent of total earnings in 1929 to 38 percent in 1934. Bank holdings of United States Government securities more than doubled and represented about 27 percent of total assets in 1934 as compared to 8 percent in 1929. The decline in interest rates and a slight decline in holdings of other securities offset the effects of the increase in holdings of Government securities on earnings.

As a result of a decline in the rates paid on time deposits, and the statutory prohibition of the payment of interest on demand deposits provided in the Banking Act of 1933, interest paid on deposits was only 20 percent of total earnings in 1934 compared with 32 percent in 1929. Salaries and wages declined sharply in total dollar amount during this recession period, as banks were closed and as the size of bank staffs was contracted in line with the reduced volume of banking activity and general operating economies. Nevertheless, wages and salaries became the principal item of expense and were 26 percent of total earnings in 1934 in contrast to 19 percent in 1929. The proportion of current earnings used for taxes remained at about 5 percent throughout this period.

Halting economic recovery prior to World War II, 1935–41.—When banks again reported net profits in 1935, they were operating under greatly changed conditions. Funds available for the expansion of earning assets were large and growing in volume as a result of a heavy inflow of gold from abroad not offset by credit and monetary operations. These funds, however, were not utilized as fully as in predepression years because of the steadily declining level of market interest rates and the dearth of attractive loan and investment opportunities at attractive yields. The result was a sustained member bank position of large excess cash reserves.

In addition to the adverse effects of the decline in the proportion of total assets held in earning assets, changes in the character and yield of these assets reduced the earning power of banks. Interest rates on all types of loans and investments were sharply below the predepression rates, and for the first time member bank holdings of securities (more than half of which were United States Government securities) represented a larger proportion of assets than loans.

A number of the provisions of the banking reform measures enacted by Congress in the early thirties also directly or indirectly affected the trend in bank earnings. The prohibition of the payment of interest on demand deposits and the maximum limits set on interest rates on time deposits operated to curb the expansion of interest-paid charges as expense items. In addition, limitations imposed by new legislation on bank activities in regard to security loans and investment banking served to eliminate some sources of earnings and expenses. On the other hand, adoption of deposit insurance served to increase expenses somewhat.

Reduced opportunities for private loans and investments at depressed levels of economic activity, particularly at a time when the public debt was being expanded to provide funds for increased Government expenditures to stimulate recovery trends, led to increased investment in United States Government securities. The search for other ways of maintaining bank earnings also led to the wider adoption of service charges on deposits and to increased bank activity in the consumer loan field.

Except for a temporary reversal in 1938, earnings on loans gradually increased during this recovery period, both in actual amount and as a proportion of total earnings. By 1941, earnings on loans represented 47 percent of earnings as compared to the low of 40 percent in 1936. Earnings on securities during the period declined somewhat in dollar amount and as a percentage of earnings despite the expansion in holdings of United States Government securities. This reflected a continuation of the decline in the average rate of return received on securities from 3.3 percent in 1934 to 1.9 percent in 1941.

Wage and salary payments continued to increase and interest on deposits continued to decline in importance as expense items. Interest on deposits used only 10 percent of total earnings in 1941 as compared to the peak of 35 percent in 1927. The assessment for Federal deposit insurance represented about 3 percent of total earnings in 1941. The proportion of earnings taken by taxes increased, largely as a result of higher Federal income taxes, and was 9 percent in 1941 compared with 5 percent in 1935.

With the exception of the years 1935 and 1938, when losses were large, and the year 1936 when profits on securities sold were large, net profits of member banks over the prewar recovery period as a whole averaged slightly more than 6 percent of total capital accounts.

The World War II period, 1942–45.—Despite the increased industrial activity that accompanied the war, member bank earnings from loans declined slightly until the end of the war. This reflected primarily changes in the types of loans being made and the low rates of return obtained on war contract financing. Bank earnings, however, were bolstered during the period by the huge volume of United States Government securities absorbed by the banking system, and by the opportunities for making profits on these securities in a supported market. In 1943, for the first time, member bank earnings from securities (largely United States Government securities) constituted the largest source of bank earnings. By 1945 earnings from United States Government securities alone accounted for 47 percent of all earnings and earnings on loans accounted for only 28 percent. Total earnings from loans and investments at the end of the war period were above those at the beginning of the war, but they were based on a much lower rate of return on a greatly expanded volume of earning assets.

In addition to the general increase in expenses during this period, income taxes continued to become a more important factor than in earlier years. In 1941, all taxes paid by member banks amounted to 129 million dollars or 9 percent of total earnings. By 1945, taxes amounted to 354 million dollars or 17 percent of earnings; 270 million of this or 13 percent of earnings was for income taxes. The decline in the proportion of income from tax-exempt and partially tax-exempt securities as well as higher tax rates contributed to this increase.

Despite the increase in taxes and other expenses, the average rate of net profits on capital of all member banks rose sharply from 6.4 percent in 1942 to a peak of 10.9 in 1945. This increased return reflected to some extent higher net current earnings but, to a much larger extent, the favorable developments in noncurrent items, particularly in profits on securities sold. A larger proportion of these net profits were retained to strengthen capital positions than in previous periods.

Postwar earnings trends, 1946–50.—At the close of the war, opportunities for loan expansion became available and by 1948 loans were again the most important source of earnings for member banks. By 1950 they received 50 percent of their earnings from loans, 27 percent from United States Government securities, 6 percent from other securities, 5 percent each from service charges on deposit accounts and trust department operations, and 7 percent from all other sources.

Expenses also increased during this period although there were only very minor changes in the relative importance of expense items. Salaries and wages were still the largest expense item in 1950, and absorbed 31 percent of total earnings. Taxes of all types accounted for 15 percent of total earnings and interest on deposits accounted for 8 percent. Payments on deposit insurance in 1950 are estimated to have amounted to about 100 million dollars or 3 percent of earnings; 56 percent of these payments was refunded in 1951.

In 1947, the impact of income taxes was temporarily eased by the adoption of a formula clarifying the tax provisions relating to the establishment of reserves for bad debt losses on loans.[97] This resulted in the establishment of large reserves for bad debt losses in 1947 and the years immediately following. In 1948 net additions to reserves for losses on loans reached a peak of 171 million dollars. The establishment of these reserves not only reduced taxes but also, since they are deducted in computing net income subject to tax, reduced reported net profits.

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[97] The Bureau of Internal Revenue approved a formula based on the average loss experience on loans in individual banks over the past 20 years. In general the formula provides that the 20-year average percentage, applied to outstanding loans at the end of the current year, determines the permissible additions for that year to reserves acceptable for tax purposes. The total amount of the tax-free reserve is limited, however, to three times the 20-year average percentage applied to current outstanding loans.

A relatively larger increase in earnings than in expenses during this period resulted in a gradual upward trend in net current earnings. This trend, together with favorable developments in noncurrent earnings and expenses, yielded net profits of 781 million dollars in 1950. This was an average return of 8.3 percent on capital accounts, which compared favorably with the average return received during the twenties. It should be noted, however, that this level of profitability was not uniformly realized in all regions. Banks in some of the financial centers where the ratio of capital to total assets remained relatively large, as in New York City, showed a considerably lower return on capital than the average for all member banks. For member banks as a group, retention of profits to strengthen capital positions continued at a high rate.

The general trends of this period extended into 1951. Both earnings and expenses continued to increase. Earnings on loans led the expansion in earnings, and a sharp increase in income taxes was the most important factor in a somewhat lower level of net profits. Preliminary figures indicate a net return of 7.6 percent on total capital accounts.

TABLE XXIV.—*Member bank earnings, 1919–50*

[In millions of dollars]

Item	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Earnings [1]	1,436	1,804	1,744	1,652	1,720	1,787	1,919	2,028	2,014	2,194	2,399
Interest and dividends on:											
U. S. Government securities											
Other securities	1,288	1,601	1,538	1,402	1,494	1,515	1,616	1,710	458	498	473
Earnings on loans									1,254	1,374	1,563
Service charges on deposits											
Other current earnings	148	202	206	250	226	272	303	317	301	321	363
Expenses	981	1,227	1,210	1,146	1,233	1,281	1,368	1,442	1,516	1,614	1,684
Salaries and wages	224	291	307	314	336	355	373	397	420	440	464
Interest on deposits	423	469	468	509	548	595	643	673	713	750	759
Taxes [2]	105	116	128	99	103	97	102	106	110	114	112
Federal deposit insurance [3]	---	---	---	---	---	---	---	---	---	---	---
Other current expenses [4]	230	351	307	224	246	234	249	266	273	310	348
Net current earnings	455	577	534	506	487	506	551	586	498	580	715
Recoveries, profits on securities, etc: [5]											
Recoveries on securities									11	11	20
Profits on securities [6]	27	32	42	69	57	53	62	53	107	90	75
Recoveries on loans									26	27	25
All other									14	13	16
Losses and charge-offs: [5]											
On securities	62	113	84	26	36	33	35	36	37	45	95
On loans	41	66	167	170	143	133	129	125	124	119	140
All other [4]	28	33	31	31	28	31	29	47	48	53	60
Net additions to reserves [5]	---	---	---	---	---	---	---	---	---	---	---
Taxes on net income [2]	---	---	---	---	---	---	---	---	---	---	---
Net profits	351	396	293	349	337	362	420	431	447	504	557
Cash dividends [7]	197	238	233	247	243	250	265	277	299	318	387

See fotnotes at end of table, p. 567.

TABLE XXIV.—*Member bank earnings, 1919–50*—Continued

[In millions of dollars]

Item	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Earnings [1]	2,158	1,841	1,554	1,237	1,244	1,207	1,271	1,321	1,274	1,296	1,323
Interest and dividends on:											
U. S. Government securities	472	480	458	426	474	467	487	481	448	444	229
Other securities											202
Earnings on loans	1,349	1,073	851	604	540	498	513	553	544	560	595
Service charges on deposits	336	288	245	21	28	36	39	45	51	54	59
Other current earnings				186	202	205	231	243	232	237	237
Expenses	1,604	1,335	1,143	859	849	833	872	902	890	895	921
Salaries and wages	452	413	357	306	327	334	352	372	380	388	400
Interest on deposits	749	581	434	288	243	208	184	181	171	159	147
Taxes [2]	113	86	67	58	62	64	81	86	82	85	100
Federal deposit insurance [3]	------	------	------	------	------	10	30	30	30	30	40
Other current expenses [4]	290	256	285	207	216	216	225	233	227	232	233
Net current earnings	554	506	410	378	394	374	399	419	384	401	402
Recoveries, profits on securities, etc.: [5]											
Recoveries on securities	12	14	60	80	186	277	160	50	54	56	64
Profits on securities [6]	71	70					231	99	153	190	159
Recoveries on loans	23	28	25	29	44	72	94	76	45	55	55
All other	12	15	28	16	24	27	23	31	28	26	24
Losses and charge-offs: [5]											
On securities	109	264	305	344	320	199	131	148	182	180	164
On loans	195	295	403	425	452	252	207	105	122	108	90
All other [4]	62	61	70	89	101	87	104	86	94	92	101
Net additions to reserves [5]	------	------	------	------	------	------	------	------	------	------	------
Taxes on net income [2]	------	------	------	------	------	------	------	------	------	------	------
Net profits	307	12	−255	−356	−225	212	465	337	265	347	349
Cash dividends [7]	367	335	245	150	173	187	199	201	198	207	210

Item	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Earnings [1]	1,417	1,487	1,650	1,874	2,102	2,403	2,579	2,828	2,986	3,265
Interest and dividends on:										
U. S. Government securities	239	336	594	802	997	1,054	921	855	859	865
Other securities	206	204	172	158	139	148	149	158	169	190
Earnings on loans	665	649	563	563	588	772	1,044	1,308	1,427	1,634
Service charges on deposits	65	68	76	86	87	100	119	141	158	172
Other current earnings	242	230	245	265	290	329	346	367	373	403
Expenses	988	1,002	1,039	1,127	1,268	1,469	1,650	1,795	1,889	2,020
Salaries and wages	426	461	487	525	580	699	797	876	926	1,000
Interest on deposits	140	128	124	144	183	212	236	250	261	271
Taxes [2]	129	81	84	83	83	82	88	90	96	109
Federal deposit insurance [3]	40	50	60	70	80	90	90	90	90	100
Other current expenses [4]	253	281	284	305	342	386	439	489	515	540
Net current earnings	429	485	611	747	835	934	929	1,033	1,097	1,245
Recoveries, profits on securities, etc.: [5]										
Recoveries on securities	64	48	82	83	113	54	40	33	16	16
Profits on securities [6]	129	60	94	116	239	183	90	55	64	82
Recoveries on loans	59	56	73	73	56	64	59	43	36	40
All other	26	24	64	47	46	55	43	58	40	37
Losses and charge-offs: [5]										
On securities	138	103	102	97	118	115	101	85	36	38
On loans	84	65	63	60	47	61	103	63	81	61
All other [4]	96	56	86	75	66	70	47	46	49	50
Net additions to reserves [5]	------	------	------	------	------	------	------	173	125	121
Taxes on net income [2]	------	68	115	184	270	285	257	234	275	369
Net profits	390	383	557	649	788	758	653	621	686	781
Cash dividends [7]	211	203	208	226	246	267	281	294	313	346

[1] Beginning with 1927 interest on balances with other banks, previously included with earnings on loans and securities, is included with other current earnings; and profits on securities sold, previously included in other current earnings, are reported in a separate item under recoveries. Beginning with 1942, service charges and fees on loans, previously included in other current earnings, are included in earnings on loans.
[2] Taxes on net income are included with other taxes in current expenses prior to 1942.
[3] Estimated.
[4] Beginning with 1942, recurring depreciation on real estate, previously included in losses and charge-offs, is included in expenses.
[5] Prior to 1948, transfers to reserves were included in losses and charge-offs, and transfers from reserves were included in recoveries.
[6] Included in other current earnings prior to 1927.
[7] Includes interest on capital notes and debentures; may include stock dividends declared by State member banks prior to 1933, and by national banks prior to 1922.

TABLE XXV.—*Sources and disposition of member bank earnings, 1919–50*

[In percent]

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Sources: [1]											
Interest and dividends on:											
U. S. Government securities											
Other securities	89.7	88.8	88.2	84.9	86.9	84.8	84.2	84.4	22.8	22.7	19.7
Earnings on loans									62.3	62.6	65.2
Service charges on deposits											
Other current earnings	10.3	11.2	11.8	15.1	13.1	15.2	15.8	15.6	14.9	14.7	15.1
Total earnings	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Disposition:											
Salaries and wages	15.6	16.2	17.6	19.0	19.5	19.9	19.4	19.6	20.9	20.1	19.3
Interest on deposits	29.4	26.0	26.9	30.8	31.9	33.3	33.5	33.2	35.4	34.2	31.7
Taxes [2]	7.3	6.4	7.3	6.0	6.0	5.4	5.3	5.2	5.5	5.2	4.7
Other current expenses [3]	16.0	19.5	17.6	13.6	14.3	13.1	13.0	13.1	13.5	14.1	14.5
Total expenses	68.3	68.1	69.4	69.4	71.7	71.7	71.2	71.1	75.3	73.6	70.2
Net current earnings	31.7	31.9	30.6	30.6	28.3	28.3	28.8	28.9	24.7	26.4	29.8
Net losses (or recoveries (+)) [3]	7.2	9.9	13.8	9.5	8.7	8.1	6.9	7.6	2.5	3.5	6.6
Taxes on net income [2]	----	----	----	----	----	----	----	----	----	----	----
Net profits	24.5	22.0	16.8	21.1	19.6	20.2	21.9	21.3	22.2	22.9	23.2
Cash dividends [4]	13.7	13.2	13.4	15.0	14.1	14.0	13.8	13.7	14.8	14.5	16.1

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Sources: [1]											
Interest and dividends on:											
U. S. Government securities											*17.3
Other securities	21.9	26.1	29.5	34.5	38.1	38.7	38.3	36.4	35.2	34.3	*15.3
Earnings on loans	62.5	58.3	54.8	48.8	43.4	41.3	40.4	41.8	42.7	43.3	45.0
Service charges on deposits				1.7	2.2	3.0	3.1	3.4	4.0	4.2	4.5
Other current earnings	15.6	15.6	15.7	15.0	16.3	17.0	18.2	18.4	18.1	18.2	17.9
Total earnings	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Disposition:											
Salaries and wages	20.9	22.4	22.9	24.8	26.3	27.7	27.7	28.2	29.8	29.9	30.3
Interest on deposits	34.7	31.5	28.0	23.3	19.6	17.3	14.5	13.7	13.4	12.3	11.1
Taxes [2]	5.3	4.7	4.3	4.7	5.0	5.3	6.4	6.5	6.5	6.6	7.6
Other current expenses [3] [5]	13.5	13.9	18.4	16.7	17.4	18.7	20.0	19.9	20.1	20.2	20.6
Total expenses	74.4	72.5	73.6	69.5	68.3	69.0	68.6	68.3	69.8	69.0	69.6
Net current earnings	25.6	27.5	26.4	30.5	31.7	31.0	31.4	31.7	30.2	31.0	30.4
Net losses (or recoveries (+)) [3]	11.4	26.8	42.8	59.3	49.8	13.4	+5.2	6.2	9.3	4.2	4.0
Taxes on net income [2]	----	----	----	----	----	----	----	----	----	----	----
Net profits	14.2	.7	−16.4	−28.8	−18.1	17.6	36.6	25.5	20.9	26.8	26.4
Cash dividends [4]	17.0	18.2	15.8	12.1	13.9	15.5	15.6	15.2	15.6	16.0	15.9

[1] Beginning with 1927 interest on balances with other banks, previously included with earnings on loans and securities, is included with other current earnings; and profits on securities sold, previously included with other current earnings, are treated as noncurrent earnings and are deducted from losses. Beginning with 1942 service charges and fees on loans, previously included in other current earnings, are included with earnings on loans.

[2] Taxes on net income are included with other taxes in current expenses prior to 1942.

[3] Beginning with 1942 recurring depreciation on real estate, previously included in losses and charge-offs, is included in expenses.

[4] Includes interest on capital notes and debentures; may include stock dividends declared by State member banks prior to 1933, and by national member banks prior to 1922.

[5] Beginning with 1935 includes deposit insurance assessments.

*Estimated.

TABLE XXV.—*Sources and disposition of member bank earnings, 1919–50*—Con.

[In percent]

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Sources: [1]										
Interest and dividends on:										
U. S. Government securities	* 16.9	* 22.6	* 36.0	* 42.8	47.4	43.9	35.7	30.2	28.8	26.5
Other securities	* 14.5	* 13.7	* 10.4	* 8.4	6.6	6.1	5.8	5.6	5.6	5.8
Earnings on loans	47.0	43.6	34.1	30.1	28.0	32.2	40.5	46.2	47.8	50.1
Service charges on deposits	4.6	4.6	4.6	4.6	4.2	4.1	4.6	5.0	5.3	5.3
Other current earnings	17.0	15.5	14.9	14.1	13.8	13.7	13.4	13.0	12.5	12.3
Total earnings	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Disposition:										
Salaries and wages	30.0	31.0	29.5	28.0	27.6	29.1	30.9	31.0	31.0	30.7
Interest on deposits	9.9	8.6	7.5	7.7	8.7	8.8	9.2	8.9	8.8	8.3
Taxes [2]	9.1	5.5	5.1	4.4	4.0	3.4	3.4	3.2	3.2	3.3
Other current expenses [3] [5]	20.7	22.3	20.9	20.0	20.0	19.8	20.5	20.4	20.3	19.6
Total expenses	69.7	67.4	63.0	60.1	60.3	61.1	61.0	63.5	63.3	61.9
Net current earnings	30.3	32.6	37.0	39.9	39.7	38.9	36.0	36.5	36.7	38.1
Net losses (or recoveries (+)) [3]	2.8	2.3	+3.8	+4.6	+10.7	+4.5	.7	6.3	4.5	2.9
Taxes on net income [2]	......	4.5	7.0	9.8	12.9	11.9	10.0	8.2	9.2	11.3
Net profits	27.5	25.8	33.8	34.7	37.5	31.5	25.3	22.0	23.0	23.9
Cash dividends [4]	14.0	13.7	12.6	12.1	11.7	11.1	10.9	10.4	10.5	10.6

* See footnotes on preceding page.

TABLE XXVI.—*Member bank earnings and profits as percentages of capital accounts, 1919–50*

Year	Percent of total capital accounts		Year	Percent of total capital accounts	
	Net current earnings	Net profits [1]		Net current earnings	Net profits [1]
1919	13.4	10.4	1935	7.3	4.1
1920	14.8	10.2	1936	7.7	8.9
1921	12.9	7.1	1937	7.9	6.3
1922	12.0	8.3	1938	7.1	4.9
1923	11.1	7.7	1939	7.3	6.3
1924	11.3	8.1	1940	7.2	6.2
1925	11.8	9.0	1941	7.4	6.7
1926	12.2	9.0	1942	8.1	6.4
1927	9.6	8.7	1943	9.7	8.8
1928	10.3	9.0	1944	11.1	9.7
1929	11.2	8.8	1945	11.5	10.9
1930	8.2	4.6	1946	11.9	9.6
1931	7.9	.2	1947	11.2	7.9
1932	7.2	−4.5	1948	12.0	7.2
1933	7.7	−7.3	1949	12.2	7.6
1934	7.8	−4.4	1950	13.2	8.3
			1951 [p]	14.5	7.6

[p] Preliminary.
[1] Net loss (—).

NOTE.—Net current earnings are total earnings from current operations less current operating expenses. Net profits are net current earnings plus recoveries, profits on securities, etc., and less losses, charge-offs, and taxes on net income. Prior to 1927 net current earnings include profits on securities sold. Beginning with 1942 net current earnings are before income taxes but after deduction of recurring depreciation. Capital accounts consist of all forms of capital including capital notes and debentures, surplus, undivided profits, and reserves for contingencies. Capital account figures used for ratios are averages of call report figures during year.

57. (*a*) Present an analysis supported by statistical tables, by 10-year intervals over the period 1920–50, of the number of banking facilities in relation to population by States.
(*b*) Present a similar analysis on a county basis for the year 1950.
(*c*) If there is any evidence of inadequacy of banking facilities in some cities, counties, or larger areas, what are your suggestions for measures to remedy such inadequacy?

In this reply, as in the reply to other questions in Section H, banking facilities have been interpreted as comprising only commercial banks and their branches.[98] Other institutions which perform one or more functions similar to those performed by national and State commercial banks are not comprehended in this reply. These constitute a varied category of lending and savings institutions that includes sales finance companies, small loan companies, credit unions, savings and loan associations, mutual savings banks, and insurance companies. Some are exclusively lending institutions, while others also provide savings facilities. In general they make special types of loans or lend in much narrower fields than those served by commercial banks. The operations of some of these financing institutions are largely localized, while others operate throughout the country through the medium of branch offices, subsidiaries, or agents.

As brought out later in this reply, the requested analyses of the number of banking offices in relation to population indicate that adequacy of banking facilities cannot be measured in this manner; that at best population per banking office is merely prima-facie indication of possible inadequacies or of over-banking; and that comprehensive evaluation of individual community situations is necessary. Such evaluations doubtless would disclose some need of additional banking facilities—to provide credit-granting services, check-cashing and depositary services, or both. The third section of the reply contains, as requested, some suggestions for measures to remedy inadequacies in banking facilities where they exist.

(*a*) *Analysis by periods and States*

The number of commercial banking offices declined from approximately 30,000 in 1920 to 19,000 in 1950, or by 38 percent; meantime the population of the country increased from 106 to 150 million, or by 43 percent. As a result, the number of persons per banking office has more than doubled in the 30-year period. This does not necessarily mean, of course, that the number of banking facilities is now inadequate or less adequate than in 1920. As has already been noted in the reply to Question H–55, the rapid growth in number of banking facilities in the first two decades of the century had resulted in an overbanked condition in many communities. Among other factors, tremendous improvements in transportation and communication facilities have made many banks and branches much more accessible than they were three decades ago.

For the country as a whole in 1920, each office served an average of approximately 3,500 persons. In 1930 the number was 4,600; in

[98] This interpretation appears to be contemplated by all the questions in Section H which is entitled "The Banking Structure". Moreover, related questions addressed to the Comptroller of the Currency, Federal Deposit Insurance Corporation, and State bank supervisors clearly have reference to national and State banks and their branches.

1940, 7,400; and in 1950, 7,900.[99] Thus, population per banking office increased 32 percent in 1920–30, 61 percent in 1930–40, and 8 percent in 1940–50. The large increases in the twenties and thirties reflect principally bank suspensions and mergers, and to a much less degree population increases. On the other hand, the relatively small increase since 1940 reflects population growth, offset in part by an increase in the number of banking offices.[1]

In most States population per banking office more than doubled between 1920 and 1950, but there is a very wide variation among the States. The relative change runs all the way from a decrease of about 20 percent in population per banking office in Rhode Island to an increase of 400 percent in North Dakota, the only State showing a population decrease over the period. The wide differences by States reflect the great variation in the changes which took place in number of banking offices, population, or both. This is illustrated by the following tabulation, which shows population per banking office, number of banking offices, and population in 1920, and percentage changes from 1920 to 1950 in the three States with the largest and the three with the smallest percentage changes in population per banking office:

State	1920			Percentage increase, or decrease (−), 1920 to 1950, in—		
	Population per banking office	Number of banking offices	Population	Population per banking office	Number of banking offices	Population
North Dakota	720	898	646, 872	400	−81	−4
Wyoming	1, 215	160	194, 402	351	−67	49
Montana	1, 274	431	548, 889	322	−74	8
Rhode Island	12, 860	47	604, 397	−19	62	31
Massachusetts	12, 191	316	3, 852, 356	7	14	22
New Hampshire	6, 330	70	443, 083	9	10	20

Corresponding percentages for all States are shown in Tables XXVII, XXVIII, and XXIX. It will be observed that in general the relatively large increases by States in population per banking office reflect to a greater extent declines in number of banking offices than increases in population. The principal factor in this decline (as brought out in the reply to Question H–55) was bank suspensions during the twenties and early thirties, and this no doubt has had an important influence on the attitudes of both bank supervisors and entrepreneurs with respect to the opening of new banks and branches.

The changes that have taken place in population and number of banking offices have tended to narrow somewhat State-to-State differences in average number of persons potentially served per banking office. Nevertheless, as Table XXVII shows, population per banking office still varies widely as between States. As compared with the 1950 United States average of approximately 8,000 persons per banking office, the averages for South Dakota, Kansas, Iowa, and Nebraska

[99] These averages were obtained simply by dividing population by number of commercial banking offices (banks and branch offices); persons served thus defined is not to be confused with the actual number of bank customers.

[1] The suspensions and mergers of the twenties and thirties followed very rapid growth in the number of banking offices in the four decades prior to 1920. Many communities had become over-banked. The reply to Question H–55 contains a detailed analysis of changes in the banking structure.

are approximately 3,000; while at the other extreme, averages of around 12,000 or more are shown for Florida, Massachusetts, Connecticut, and Alabama. The relative importance of factors underlying these differences would be difficult to evaluate except in a general way. They include such diverse factors as kind, stage, and extent of economic development; density of population and its distribution between rural and urban areas; attitude of investors interested in banking as a source of profit; capital and other statutory requirements for establishment of banks and branches; provision for or prohibition of branches; and policy and attitude of bank supervisory authorities. There is no clear evidence in the State totals of any correlation between population per banking office and statutory permission, restriction, or prohibition of branch banking. Density of population, character and extent of economic development, transportation and communication facilities, and distribution of population between urban and rural areas appear to be much more important in determining the number of persons that can be served per banking office.

The foregoing comparison of banking offices and population by States brings out the trends over a period of years, and indicates that variation by regions can be attributed in large part to economic development. The averages for individual States, however, are not satisfactory measures of the adequacy of facilities because they conceal differences within the State. For this reason, additional analysis by a smaller geographic unit—the county—is needed for factual background on variations in banking facilities throughout the country. As stated in the reply to section (c) of this question, however, even an analysis by counties cannot serve to determine whether or not banking facilities are adequate.

(b) Analysis by counties

The 1950 census of population reports 3,102 counties (including independently incorporated cities not parts of counties) in the United States. A distribution of these counties by number of banking offices and population of the county, shown in Table XXX, page 581, indicates that in general the number of offices increases as population increases. Table XXX also shows that 76 counties have no banking facilities within their boundaries and almost half of the counties have 3 or less banking offices. The table also shows, however, that most counties with no banking offices and many with few banking facilities have relatively small populations. There were 55 counties with populations below 2,000 and 126 with populations of 2,000–4,000; 155 of these counties have no banking offices, or only 1, within their boundaries.

The counties with no banking offices and/or small population are located principally in the Western Mountain States, in some of the southeastern coastal regions, and in Texas. Similarly, counties with very few banking offices are located principally in these same areas and in the East South Central States of Kentucky, Mississippi, and Tennessee. Even in the States which are densely populated and industrialized, certain sections may be quite sparsely populated, because of mountainous terrain, arid climate, or similar reasons, and have small numbers of banking offices. For example, 5 counties in California, 2 in Illinois, 1 in New York, and 1 in Pennsylvania have populations of less than 6,000 and few banking offices.

Counties with large populations and large numbers of banking offices are those containing the population centers of the country such as New York, Los Angeles, Philadelphia, and Chicago. Nine counties with very large populations have more than 100 banking offices each, including Los Angeles County with 398 offices and New York City with 555 offices.[2]

The importance of evaluating individual situations rather than mass statistical data in determining the adequacy or inadequacy of banking facilities (discussed under section (c) of this reply) is illustrated by the fact that two counties with populations of 50,000–100,000 are shown as having no banking offices. The facts are that the populations of these two counties—Henrico and Norfolk Counties, Va.—are located on the outskirts of the independently incorporated cities of Richmond, Norfolk, and Portsmouth, and presumably are served by the banking offices of these cities.

As might be expected, banking offices in densely populated counties serve potentially many more persons on the average than banks or branches located in less densely populated rural regions. This can be seen in the following figures of average population per county and per banking office for the 3,102 counties in the United States distributed by number of banking offices in the county:

Number of banking offices in county	Number of counties	Average population: Per county	Average population: Per banking office	Number of banking offices in county	Number of counties	Average population: Per county	Average population: Per banking office
None	76	5, 533	----------	6 to 10	686	41, 441	5, 579
1	457	8, 584	8, 584	11 to 20	253	100, 517	7, 227
2	501	14, 436	7, 218	21 to 30	52	263, 520	10, 722
3	418	19, 764	6, 588	31 to 50	27	466, 074	12, 521
4	337	22, 651	5, 663	Over 50	26	1, 375, 794	13, 448
5	269	26, 222	5, 244				
				Total	3, 102	48, 582	7, 946

Factors underlying the wide range by counties in the number of banking offices and in population per banking office include those already mentioned in connection with the analysis by States. Since counties are more homogeneous units than States in an economic sense, however, their analysis provides some grounds for observing the broad effect of economic characteristics. Counties located in and dependent principally on agriculture have a relatively small number of banking offices, and population per office. Conversely, densely populated counties with primarily commercial and industrial activities have many more banking offices, and the average banking office is able to serve many more persons than one located in a rural region. This is disclosed in detail by Table XXXI, which lists all counties in the country, arranged alphabetically within States, and shows for each the number of banking offices as of December 31, 1950, the 1950 population, and population per banking office.

(*c*) *Remedies for inadequate banking facilities*

The analyses under (*a*) and (*b*) above indicate that the adequacy of banking facilities in any city, county, or larger area cannot be meas-

[2] Chicago, which has no branch banking, has a much larger population per banking office than the other cities named. New York City, though consisting of five boroughs or counties, is commonly counted as a single unit. The Borough of Manhattan (or New York County) has 280 banking offices.

ured merely by comparisons of population and number of banking offices. At best, a very large population per banking office is merely prima facie indication of possible inadequacy; conversely, a very small population per banking office is merely prima facie indication of possible overbanking. The wide variations in population per banking office disclosed by the general statistical analyses emphasize that evaluation of individual community situations is necessary to determine adequacy of banking facilities. This should take into account such matters as banking services already available in the community, accessibility of banking offices in nearby communities, lending facilities provided by nonbank financial institutions, economic situation of the community, and density of population.

In a private enterprise system, it is reasonable to suppose that when there is a need for an additional banking office, an opportunity for profit from its operations, and the legal requirements can be met, attempts will ordinarily be made to fill the need. In other words, establishment of new banks and branches—the number of which has been quite numerous in recent years—results from the operation of a demand and supply relationship, as in the case of other businesses, with due regard to filling the demand with facilities which meet the necessary legal requirements. It might well be found, however, that there are some genuine cases of inadequacy stemming from requirements which are unnecessarily restrictive, e.g., capital requirements. There are also persistent reports that, in some regions at least, the raising of capital, either in order to organize a new bank or to strengthen the capital position of an existing bank, is quite difficult. The problems involved may be sufficiently important to warrant special study. Replies to the questions addressed by the Subcommittee to the Comptroller of the Currency and the State Bank Supervisors, requesting analyses of action taken during the last 10 years on applications for the chartering of new banks and branches, doubtless will throw a good deal of light on the demand and need for additional banking facilities.[3] The replies of the Presidents of the Federal Reserve Banks on the question of adequacy or inadequacy of banking facilities in their respective districts also will shed light on this subject.

Concrete suggestions as to remedial steps which might be taken, in the event cases of inadequacy are found, would depend on the nature of the inadequacies—where, to what extent, and why they exist. Pending such detailed determinations, the suggestions outlined below are of necessity somewhat general. They treat separately the primary types of banking services: credit-granting services and deposit and check-cashing services.

Credit-granting services.—The skill and success with which the bank lending function is performed is perhaps the most important factor in the safety of depositors' and stockholders' funds, the profitability of a bank, and its very existence.[4] Of equal or greater importance is the part played by lending facilities in the healthy development of any community; wise mobilization and utilization of community resources through the medium of banks is vital to economic growth.

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[3] These analyses are to show the number of applications filed for bank charters, branch permits, and bank mergers, the number granted, and the number rejected by principal reasons (including existence of adequate banking facilities) for rejection.

[4] The lending rather than the investing phase of the credit-granting function is of especial interest here since that is the phase most directly concerned with the community in which a banking office is situated.

On a broader scale, the strength of the banking system as a whole and the economic welfare of the country depends in large measure on the skill with which the lending function is performed.

This phase of banking requires competent and experienced personnel even at a small banking office, since it involves passing on a variety of applications for loans in addition to providing the routine and valuable depositary services. The kind of management and personnel needed to lend money safely and soundly, together with the required capital protection, cannot be provided unless the banking office transacts enough business, primarily in the form of loans, to produce earnings sufficient to meet expenses, losses on loans and investments, taxes, and dividends, and to provide additions to surplus for the further protection of depositors.

The banking crisis of the early thirties demonstrated that, in addition to capital requirements, certain other important though less tangible requirements are needed if a healthy private banking system is to be maintained. Federal law, therefore, now requires the Comptroller of the Currency before granting a newly organized national bank a permit to commence business, the Federal Deposit Insurance Corporation before insuring a nonmember State bank, and the Board of Governors of the Federal Reserve System before admitting a State bank to membership, to consider "the financial history and condition of the bank, the adequacy of its capital structure, its future earnings prospects, the general character of its management, the convenience and needs of the community to be served by the bank * * *." Similar considerations are required or are given to the establishment of branches.

While such requirements clearly should not be abandoned in order to provide additional banking facilities, it would be appropriate and desirable to revise the specific and onerous dollar capital requirements for the establishment of branches by national banks and State member banks. At present, a member bank must have a capital stock of at least $500,000 (except in States that have a population below 1,000,000) to establish even one branch outside the head office city even though its location is adjacent to the city; this requirement applies no matter how small the bank or how limited the functions of the branch. If this specific and unrealistic requirement were relaxed, some additional banking facilities might be provided in States where branch banking is permitted. No reduction appears warranted in the present $50,000 minimum capital requirement for the organization of a national bank, particularly since the average deposit liabilities of banks are now about four times as high as they were when this minimum was prescribed. In this connection it should be noted, as mentioned earlier, that there are persistent reports that in some regions bank capital is diffcult to raise. It may be that in such regions greater assurance of adequate profits on investment is needed if capital is to be attracted into the banking business.

Deposit and check-cashing services.—Statutory capital requirements for the organization of national banks and for admission of State banks to Federal Reserve membership are not differentiated on the basis of powers granted or functions performed. Thus, the law gives every national bank the same powers, except trust powers for which separate application has to be made. The same thing is true in general of State-chartered banks, though in many States there are two or more kinds of State banks with different powers and requirements, such as State commercial banks, trust companies, stock savings banks, mutual savings banks, and industrial banks.

One exception, however, is of special interest if more adequate facilities for deposit and check-cashing services are needed. In South Carolina, provision has been made for limited-function banks known as cash depositories. Such depositories are empowered only to receive and pay out deposits (both demand and time), and to render services incidental to the depositary function, such as selling bank drafts and cashiers' checks; they are allowed to make reasonable charges for these services; they are not permitted to make loans except for the account of their customers; their deposits must all be held in the form of cash or its equivalent, or be invested in United States Government securities or, up to 25 percent of deposits, in South Carolina State or municipal securities or cotton producers' notes eligible for sale to the Commodity Credit Corporation. The capital stock requirement for a cash depository is only $2,500, compared with a minimum of $25,000 for a State bank in South Carolina. The number of these depositories has declined from 39 in 1935 to 23 in 1950, and their deposits have increased from about 2 to 8 million dollars. Experience in South Carolina, over the years, has been that several cash depositories have converted to regular State banks, presumably reflecting growth of communities to a size where full-power banks could be supported.

If other States or the Federal government authorized similar depositories, it would help to meet the need (if there is any such need) for limited-power banking facilities, i. e., without lending powers. Provision could be made for establishment of such depositories only in communities where full banking services are lacking, and for their discontinuance when a full-power banking office is established in the same community. Obviously, less skilled and less expensive personnel would be required in such limited-power banks than in banks with full-fledged lending powers, with a resultant better chance of profitable operations in places where a full-power bank cannot be supported.

The situation is somewhat similar in so far as branches are concerned. Federal law makes no differentiation on the basis of functions. Thus, a branch whose operations are of a strictly limited nature through the choice of its parent bank is subject to the same capital requirements as a full-fledged branch doing all kinds of credit business.[5] The National Bank Act defines the term branch as including "any branch bank, branch office, branch agency, additional office, or any branch place of business * * * at which deposits are received, or checks paid, or money lent."[6] To establish even a limited power branch outside of the city in which the parent bank is located, a national bank in most States must have a capital stock of at least $500,000. The same definition and capital requirements apply to

[5] Capital requirements apply, however, only to branches located outside the parent bank's head office city.

[6] The act specifically exempts "a seasonal agency in any resort community" within the head office county; no capital requirements are prescribed with respect to such an agency. Limited-power banking facilities at military and Government establishments, provided by the Treasury Department by arrangements with banks designated as its depositaries and fiscal agencies, are not branches and therefore are not subject to the branch capital requirements prescribed for member banks. There were 156 such facilities on December 31, 1951.

State member banks; and the same definition, though no capital requirements, applies to insured nonmember banks.

Although Federal law does not differentiate between branches on the basis of powers or functions, some State laws do so. In some States both full and limited power branches are recognized, while in others only the limited power type is permitted. For example, in Arkansas, Iowa, New Mexico (prior to 1951), and North Dakota, where branch banking as such is prohibited, provision has been made for the establishment and operation of limited-power offices, commonly termed receiving and paying stations. The laws of Wisconsin had a similar provision, and at the end of 1950 most of the 151 branches and offices in that State were of the limited-power type. This law, however, was amended in 1947 to prohibit the further establishment of even this limited type of branch office.

It seems obvious that additional depositary and check-cashing facilities could be provided if the existing specific capital requirements for the establishment of branches of national and State member banks were relaxed, at least with respect to the establishment of banking offices whose functions would be limited to the receipt and payment of deposits, etc. It should be understood that national banks would not be permitted to establish such offices unless and until State banks in a given State had corresponding authority. Such an office (of either a national or a State member bank) should not be authorized without reasonable assurance that capable personnel would be available for handling whatever operations it was authorized to perform, and that the office, in due course, would operate at a profit.

Consideration might be given to even further extension of limited-power banking. Appropriate specific provision might be made in Federal and State laws for the establishment of part-time depositary facilities. Such an office could transact business for a short period every day or on specified days; or, offices at several different locations could be manned by one personnel force on designated days during the week. Consideration might even be given to mobile banking facilities which would transact banking business in given communities at fixed times; such facilities are provided in some foreign countries. These forms of part-time banking facilities might present serious problems from both practical and legal standpoints, but the ideas might be explored if genuine inadequacies in banking facilities are found to exist and additional facilities cannot profitably be provided otherwise.

TABLE XXVII.—*Population per banking office and percentage change therein by geographic division and State, 1920–50* [1]

Geographic division and State	1920	1930	1940	1950	Percentage increase, 1920 to 1950 [2]
New England	9,137	8,753	10,533	10,477	15
Maine	5,120	4,862	6,724	6,819	33
New Hampshire	6,330	6,462	7,447	6,925	9
Vermont	4,005	3,826	4,177	4,664	16
Massachusetts	12,191	11,154	13,791	13,065	7
Rhode Island	12,860	11,458	11,146	10,420	−19
Connecticut	9,933	9,919	11,707	12,391	25
Middle Atlantic	7,149	6,478	9,071	9,832	38
New York	9,078	7,383	9,753	10,481	15
New Jersey	7,949	6,334	8,685	9,888	24
Pennsylvania	5,544	5,629	8,426	9,019	63
East North Central	3,798	4,249	7,444	8,089	113
Ohio	4,615	5,330	7,976	8,979	95
Indiana	2,778	3,524	6,024	6,612	138
Illinois	4,329	4,534	9,401	9,756	125
Michigan	4,197	4,153	8,688	9,356	123
Wisconsin	2,689	3,130	4,502	4,879	81
West North Central	1,393	2,204	3,780	3,977	185
Minnesota	1,583	2,524	4,094	4,348	175
Iowa	1,411	2,032	3,161	3,169	125
Missouri	2,061	2,939	6,055	6,580	219
North Dakota	720	1,860	3,547	3,603	400
South Dakota	917	1,853	3,183	2,994	226
Nebraska	1,081	1,778	3,140	3,156	192
Kansas	1,312	1,790	2,712	3,113	137
South Atlantic	4,176	6,037	9,178	9,226	121
Delaware	4,055	4,110	4,759	5,484	35
Maryland	4,914	5,005	7,142	8,279	68
District of Columbia	8,930	7,490	12,752	12,534	40
Virginia	4,545	4,640	6,937	7,772	71
West Virginia	4,330	5,963	10,450	11,142	157
North Carolina	4,101	6,674	10,061	9,169	124
South Carolina	3,537	7,126	11,045	10,746	204
Georgia	3,924	6,780	10,142	7,846	100
Florida	3,627	7,093	10,781	13,519	273
East South Central	4,708	5,542	8,473	8,540	81
Kentucky	4,131	4,508	6,512	6,864	66
Tennessee	4,052	4,775	8,379	8,333	106
Alabama	6,312	7,829	11,953	12,198	93
Mississippi	5,044	6,320	8,735	8,100	61
West South Central	3,062	4,673	7,889	8,076	164
Arkansas	3,569	4,648	8,439	7,608	113
Louisiana	5,183	6,368	11,879	11,089	114
Oklahoma	2,115	4,007	5,991	5,771	173
Texas	3,012	4,554	7,673	8,382	178
Mountain	2,062	3,938	7,143	7,713	274
Montana	1,274	2,906	5,040	5,373	322
Idaho	1,945	3,248	6,033	6,007	209
Wyoming	1,215	2,685	4,323	5,482	351
Colorado	2,332	3,836	7,694	8,387	260
New Mexico	2,815	7,559	11,080	10,321	267
Arizona	3,094	6,135	13,138	11,188	262
Utah	3,379	4,979	7,643	8,720	158
Nevada	2,346	2,602	5,250	5,929	153
Pacific	3,517	4,422	6,787	8,970	155
Washington	3,366	4,681	7,856	9,080	170
Oregon	2,818	4,165	7,839	8,845	214
California	3,799	4,401	6,431	8,964	136
Total United States	3,481	4,586	7,366	7,946	128

[1] Computed from basic information in Tables XXVIII and XXIX. See footnotes to these tables.
[2] Minus sign denotes decrease.

TABLE XXVIII.—*Number of banking offices, by geographic division and State, 1920–50* [1]

Geographic division and State	1920	1930	1940	1950	Percentage change, 1920 to 1950 [2]
New England	810	933	801	889	+10
Maine	150	164	126	134	−11
New Hampshire	70	72	66	77	+10
Vermont	88	94	86	81	−8
Massachusetts	316	381	313	359	+14
Rhode Island	47	60	64	76	+62
Connecticut	139	162	146	162	+17
Middle Atlantic	3,114	4,054	3,036	3,068	−1
New York	1,144	1,705	1,382	1,415	+24
New Jersey	397	638	479	489	+23
Pennsylvania	1,573	1,711	1,175	1,164	−26
East North Central	5,654	5,954	3,577	3,758	−34
Ohio	1,248	1,247	866	885	−29
Indiana	1,055	919	569	595	−44
Illinois	1,498	1,683	840	893	−40
Michigan	874	1,166	605	681	−22
Wisconsin	979	939	697	704	−28
West North Central	9,004	6,033	3,576	3,536	−61
Minnesota	1,508	1,016	682	686	−55
Iowa	1,704	1,216	803	827	−51
Missouri	1,652	1,235	625	601	−64
North Dakota	898	366	181	172	−81
South Dakota	694	374	202	218	−69
Nebraska	1,199	775	419	420	−65
Kansas	1,349	1,051	664	612	−55
South Atlantic	3,350	2,616	1,942	2,296	−31
Delaware	55	58	56	58	+5
Maryland	295	326	255	283	−4
District of Columbia	49	65	52	64	+31
Virginia	508	522	386	427	−16
West Virginia	338	290	182	180	−47
North Carolina	624	475	355	443	−29
South Carolina	476	244	172	197	−59
Georgia	738	429	308	439	−41
Florida	267	207	176	205	−23
East South Central	1,889	1,784	1,272	1,344	−29
Kentucky	585	580	437	429	−27
Tennessee	577	548	348	395	−32
Alabama	372	338	237	251	−33
Mississippi	355	318	250	269	−24
West South Central	3,345	2,606	1,656	1,800	−46
Arkansas	491	399	231	251	−49
Louisiana	347	330	199	242	−30
Oklahoma	959	598	390	387	−60
Texas	1,548	1,279	836	920	−41
Mountain	1,618	940	581	658	−59
Montana	431	185	111	110	−74
Idaho	222	137	87	98	−56
Wyoming	160	84	58	53	−67
Colorado	403	270	146	158	−61
New Mexico	128	56	48	66	−48
Arizona	108	71	38	67	−38
Utah	133	102	72	79	−41
Nevada	33	35	21	27	−18
Pacific	1,583	1,853	1,434	1,615	+2
Washington	403	334	221	262	−35
Oregon	278	229	139	172	−38
California	902	1,290	1,074	1,181	+31
Total, United States	30,367	26,773	17,875	18,964	−38

[1] Comprises all commercial banks and their branches including, in 1950, 122 banking "facilities" at military and other Government installations designated as depositary and fiscal agents of the Treasury; these "facilities" perform limited banking functions and were not in existence prior to 1942. Excluded are mutual savings banks and their branches which are not usually considered in analyses of the banking structure; such offices are not numerous (529 banks and 213 branches in 1950), are concentrated largely in the Northeastern States, and their exclusion does not materially affect the results in Table XXVII. For 1920, figures are as of June for banks and as of an unspecified month for branches; for 1930, figures are as of June; for 1940 and 1950, figures are as of December.

[2] Minus sign denotes decrease.

TABLE XXIX.—*Population, by geographic division and State, 1920–50* [1]

Geographic division and State	1920	1930	1940	1950	Percentage increase, 1920 to 1950 [2]
New England	7,400,909	8,166,341	8,437,290	9,314,453	26
Maine	768,014	797,423	847,226	913,774	19
New Hampshire	443,083	465,293	491,524	533,242	20
Vermont	352,428	359,611	359,231	377,747	7
Massachusetts	3,852,356	4,249,614	4,316,721	4,690,514	22
Rhode Island	604,397	687,497	713,346	791,896	31
Connecticut	1,380,631	1,606,903	1,709,242	2,007,280	45
Middle Atlantic	22,261,144	26,260,750	27,539,487	30,163,533	35
New York	10,385,227	12,588,066	13,479,142	14,830,192	43
New Jersey	3,155,900	4,041,334	4,160,165	4,835,329	53
Pennsylvania	8,720,017	9,631,350	9,900,180	10,498,012	20
East North Central	21,475,543	25,297,185	26,626,342	30,399,368	42
Ohio	5,759,394	6,646,697	6,907,612	7,946,627	38
Indiana	2,930,390	3,238,503	3,427,796	3,934,224	34
Illinois	6,485,280	7,630,654	7,897,241	8,712,176	34
Michigan	3,668,412	4,842,325	5,256,106	6,371,766	74
Wisconsin	2,632,067	2,939,006	3,137,587	3,434,575	30
West North Central	12,544,249	13,296,915	13,516,990	14,061,394	12
Minnesota	2,387,125	2,563,953	2,792,300	2,982,483	25
Iowa	2,404,021	2,470,939	2,538,268	2,621,073	9
Missouri	3,404,055	3,629,367	3,784,664	3,954,653	16
North Dakota	646,872	680,845	641,935	619,636	−4
South Dakota	636,547	692,849	642,961	652,740	3
Nebraska	1,296,372	1,377,963	1,315,834	1,325,510	2
Kansas	1,769,257	1,880,999	1,801,028	1,905,299	8
South Atlantic	13,990,272	15,793,589	17,823,151	21,182,335	51
Delaware	223,003	238,380	266,505	318,085	43
Maryland	1,449,661	1,631,526	1,821,244	2,343,001	62
District of Columbia	437,571	486,869	663,091	802,178	83
Virginia	2,309,187	2,421,851	2,677,773	3,318,680	44
West Virginia	1,463,701	1,729,205	1,901,974	2,005,552	37
North Carolina	2,559,123	3,170,276	3,571,623	4,061,929	59
South Carolina	1,683,724	1,738,765	1,899,804	2,117,027	26
Georgia	2,895,832	2,908,506	3,123,723	3,444,578	19
Florida	968,470	1,468,211	1,897,414	2,771,305	186
East South Central	8,893,307	9,887,214	10,778,225	11,477,181	29
Kentucky	2,416,630	2,614,589	2,845,627	2,944,806	22
Tennessee	2,337,885	2,616,556	2,915,841	3,291,718	41
Alabama	2,348,174	2,646,248	2,832,961	3,061,743	30
Mississippi	1,790,618	2,009,821	2,183,796	2,178,914	22
West South Central	10,242,224	12,176,830	13,064,525	14,537,572	42
Arkansas	1,752,204	1,854,482	1,949,387	1,909,511	9
Louisiana	1,798,509	2,101,593	2,363,880	2,683,516	49
Oklahoma	2,028,283	2,396,040	2,336,434	2,233,351	10
Texas	4,663,228	5,824,715	6,414,824	7,711,194	65
Mountain	3,336,101	3,701,789	4,150,003	5,074,998	52
Montana	548,889	537,606	559,456	591,024	8
Idaho	431,866	445,032	524,873	588,637	36
Wyoming	194,402	225,565	250,742	290,529	49
Colorado	939,629	1,035,791	1,123,296	1,325,089	41
New Mexico	360,350	423,317	531,818	681,187	89
Arizona	334,162	435,573	499,261	749,587	124
Utah	449,396	507,847	550,310	688,862	53
Nevada	77,407	91,058	110,247	160,083	107
Pacific	5,566,871	8,194,433	9,733,262	14,486,527	160
Washington	1,356,621	1,563,396	1,736,191	2,378,963	75
Oregon	783,389	953,786	1,089,684	1,521,341	94
California	3,426,861	5,677,251	6,907,387	10,586,223	209
Total United States	105,710,620	122,775,046	131,669,275	150,697,361	43

[1] Official decennial census of population data.
[2] Minus sign denotes decrease.

TABLE XXX.—*Distribution of counties, by number of commercial banking offices and population, 1950*

Number of banking offices in county	Number of counties with populations of—												Total
	Under 1,000	1,000–1,999	2,000–3,999	4,000–5,999	6,000–7,999	8,000–9,999	10,000–19,999	20,000–29,999	30,000–49,999	50,000–99,999	100,000–499,999	500,000 and over	
None	16	18	16	10	9	1	3	1	------	2	------	------	76
1	1	17	87	76	76	61	119	15	4	1	------	------	457
2	------	3	18	55	62	75	177	75	30	6	------	------	501
3	------	------	2	19	36	39	174	76	57	14	1	------	418
4	------	------	3	4	12	15	152	83	54	12	2	------	337
5	------	------	------	3	4	15	90	73	63	20	1	------	269
6	------	------	------	------	6	9	63	54	63	34	8	------	237
7	------	------	------	------	------	8	35	31	46	30	9	------	159
8	------	------	------	------	1	------	39	26	28	25	6	------	125
9	------	------	------	------	------	------	19	15	31	15	9	------	89
10	------	------	------	------	------	------	11	9	26	18	12	------	76
11–15	------	------	------	------	------	------	7	28	46	61	48	------	190
16–20	------	------	------	------	------	------	------	------	4	15	42	2	63
21–30	------	------	------	------	------	------	------	------	1	3	47	1	52
31–50	------	------	------	------	------	------	------	------	------	------	14	13	27
51–100	------	------	------	------	------	------	------	------	------	------	------	17	17
Over 100	------	------	------	------	------	------	------	------	------	------	------	9	9
Total	17	38	126	167	206	223	889	486	453	256	199	42	3,102

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
ALABAMA			
Autauga	18,177	1	18,177
Baldwin	41,046	5	8,209
Barbour	28,860	4	7,215
Bibb	17,955	2	8,978
Blount	28,997	3	9,666
Bullock	16,075	2	8,038
Butler	29,301	2	14,651
Calhoun	79,783	6	13,297
Chambers	39,560	2	19,780
Cherokee	17,455	3	5,818
Chilton	26,839	4	6,710
Choctaw	19,188	1	19,188
Clarke	26,498	3	8,833
Clay	13,964	2	6,982
Cleburne	11,976	1	11,976
Coffee	30,717	3	10,239
Colbert	39,413	4	9,853
Conecuh	21,807	2	10,904
Coosa	11,771	1	11,771
Covington	40,333	5	8,067
Crenshaw	19,013	3	6,338
Cullman	49,050	4	12,263
Dale	20,830	3	6,943
Dallas	55,992	5	11,198
De Kalb	45,088	4	11,272
Elmore	31,672	3	10,557
Escambia	31,463	6	5,244
Etowah	93,857	7	13,408
Fayette	19,393	3	6,464
Franklin	25,790	5	5,158
Geneva	25,928	4	6,482
Greene	16,580	1	16,580
Hale	20,828	2	10,414
Henry	18,661	2	9,331
Houston	46,554	6	7,759
Jackson	38,795	5	7,759
Jefferson	554,186	18	30,788
Lamar	16,423	3	5,474
Lauderdale	54,183	6	9,031
Lawrence	27,141	2	13,571
ALABAMA—con.			
Lee	45,054	5	9,011
Limestone	35,712	3	11,904
Lowndes	18,034	1	18,034
Macon	30,696	3	10,232
Madison	73,032	4	18,258
Marengo	29,460	6	4,910
Marion	27,291	5	5,458
Marshall	45,098	7	6,443
Mobile	228,835	6	38,139
Monroe	25,722	5	5,144
Montgomery	137,512	4	34,378
Morgan	52,861	4	13,215
Perry	20,442	3	6,814
Pickens	24,359	4	6,090
Pike	30,599	4	7,650
Randolph	22,545	4	5,636
Russell	40,289	3	13,430
St. Clair	26,636	4	6,659
Shelby	30,375	3	10,125
Sumter	23,628	2	11,814
Talladega	63,788	5	12,758
Tallapoosa	34,666	3	11,555
Tuscaloosa	94,017	2	47,009
Walker	63,653	6	10,609
Washington	15,612	1	15,612
Wilcox	23,451	4	5,863
Winston	18,245	2	9,123
ARIZONA			
Apache	27,767	------	------
Cochise	31,488	7	4,498
Coconino	23,910	2	11,955
Gila	24,158	3	8,053
Graham	12,985	1	12,985
Greenlee	12,805	2	6,403
Maricopa	331,770	24	13,824
Mohave	8,510	1	8,510
Navajo	29,446	2	14,723
Pima	141,216	11	12,838

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
ARIZONA—con.			
Pinal	43,191	4	10,798
Santa Cruz	9,344	1	9,344
Yavapai	24,991	6	4,165
Yuma	28,006	3	9,335
ARKANSAS			
Arkansas	23,665	5	4,733
Ashley	25,660	6	4,277
Baxter	11,683	1	11,683
Benton	38,076	6	6,346
Boone	16,260	2	8,130
Bradley	15,987	3	5,329
Calhoun	7,132	1	7,132
Carroll	13,244	3	4,415
Chicot	22,306	3	7,435
Clark	22,998	6	3,833
Clay	26,674	3	8,891
Cleburne	11,487	3	3,829
Cleveland	8,956	2	4,478
Columbia	28,770	4	7,193
Conway	18,137	1	18,137
Craighead	50,613	7	7,230
Crawford	22,727	4	5,682
Crittenden	47,184	5	9,437
Cross	24,757	4	6,189
Dallas	12,416	3	4,139
Desha	25,155	3	8,385
Drew	17,959	4	4,490
Faulkner	25,289	2	12,645
Franklin	12,358	2	6,179
Fulton	9,187	2	4,594
Garland	47,102	2	23,551
Grant	9,024	1	9,024
Greene	29,149	4	7,287
Hempstead	25,080	3	8,360
Hot Spring	22,181	2	11,091
Howard	13,342	3	4,447
Independence	23,488	2	11,744
Izard	9,953	3	3,318
Jackson	25,912	5	5,182
Jefferson	76,075	3	25,358
Johnson	16,138	1	16,138
Lafayette	13,203	4	3,301
Lawrence	21,303	3	7,101
Lee	24,322	2	12,161
Lincoln	17,079	1	17,079
Little River	11,690	2	5,845
Logan	20,260	3	6,753
Lonoke	27,278	6	4,546
Madison	11,734	3	3,911
Marion	8,609	1	8,609
Miller	32,614	1	32,614
Mississippi	82,375	10	8,238
Monroe	19,540	3	6,513
Montgomery	6,680	1	6,680
Nevada	14,781	1	14,781
Newton	8,685	1	8,685
Ouachita	33,051	5	6,610
Perry	5,978	1	5,978
Phillips	46,254	6	7,709
Pike	10,032	3	3,344
Poinsett	39,311	6	6,552
Polk	14,182	2	7,091
Pope	23,291	5	4,658
Prairie	13,768	3	4,589
Pulaski	196,685	6	32,781
Randolph	15,982	2	7,991
Saline	23,816	2	11,908
Scott	10,057	1	10,057
Searcy	10,424	2	5,212
Sebastian	64,202	8	8,025
Sevier	12,293	3	4,098
Sharp	8,999	5	1,800
St. Francis	36,841	4	9,210
Stone	7,662	1	7,662
ARKANSAS—con.			
Union	49,686	6	8,281
Van Buren	9,687	1	9,687
Washington	49,979	7	7,140
White	38,040	9	4,227
Woodruff	18,957	3	6,319
Yell	14,057	4	3,514
CALIFORNIA			
Alameda	740,315	81	9,140
Alpine	241	----	----
Amador	9,151	7	1,307
Butte	64,930	7	9,276
Calaveras	9,902	2	4,951
Colusa	11,651	5	2,330
Contra Costa	298,984	30	9,966
Del Norte	8,078	1	8,078
Eldorado	16,207	1	16,207
Fresno	276,515	23	12,022
Glenn	15,448	3	5,149
Humboldt	69,241	9	7,693
Imperial	62,975	7	8,996
Inyo	11,658	2	5,829
Kern	228,309	17	13,430
Kings	46,768	6	7,795
Lake	11,481	4	2,870
Lassen	18,474	2	9,237
Los Angeles	4,151,687	398	10,431
Madera	36,964	3	12,321
Marin	85,619	18	4,757
Mariposa	5,145	1	5,145
Mendocino	40,854	9	4,539
Merced	69,780	11	6,344
Modoc	9,678	2	4,830
Mono	2,115	----	----
Monterey	130,498	22	5,932
Napa	46,603	5	9,321
Nevada	19,888	4	4,972
Orange	216,224	27	8,008
Placer	41,649	9	4,628
Plumas	13,519	3	4,506
Riverside	170,046	23	7,393
Sacramento	277,140	22	12,597
San Benito	14,370	3	4,790
San Bernardino	281,642	27	10,431
San Diego	556,808	51	10,918
San Francisco	775,357	107	7,246
San Joaquin	200,750	18	11,153
San Luis Obispo	51,417	8	6,427
San Mateo	235,659	28	8,416
Santa Barbara	98,220	14	7,016
Santa Clara	290,547	29	10,019
Santa Cruz	66,534	11	6,049
Shasta	36,413	4	9,103
Sierra	2,410	1	2,410
Siskiyou	30,733	10	3,073
Solano	104,833	16	6,552
Sonoma	103,405	20	5,170
Stanislaus	127,231	17	7,484
Sutter	26,239	3	8,746
Tehama	19,276	3	6,425
Trinity	5,087	1	5,087
Tulare	149,264	16	9,329
Tuolumne	12,584	1	12,584
Ventura	114,647	19	6,034
Yolo	40,640	6	6,773
Yuba	24,420	4	6,105
COLORADO			
Adams	40,353	4	10,088
Alamosa	10,525	2	5,263
Arapahoe	51,687	6	8,615
Archuleta	3,025	1	3,025
Baca	7,947	2	3,974
Bent	8,793	2	4,397
Boulder	48,144	7	6,878
Chaffee	7,115	1	7,115

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
COLORADO—con.			
Cheyenne	3,445	2	1,723
Clear Creek	3,276	1	3,276
Conejos	10,116	2	5,058
Costilla	6,047		
Crowley	5,215	1	5,215
Custer	1,565		
Delta	17,335	4	4,334
Denver	412,856	16	25,804
Dolores	1,959	1	1,959
Douglas	3,489	1	3,489
Eagle	4,466	1	4,466
Elbert	4,469	1	4,469
El Paso	74,265	7	10,609
Fremont	18,091	3	6,030
Garfield	11,595	2	5,798
Gilpin	845		
Grand	3,904	2	1,952
Gunnison	5,689	2	2,845
Hinsdale	245		
Huerfano	10,508	1	10,508
Jackson	1,966		
Jefferson	55,465	4	13,866
Kiowa	2,990	1	2,990
Kit Carson	8,569	3	2,856
Lake	6,139	1	6,139
La Plata	14,854	3	4,951
Larimer	43,495	6	7,249
Las Animas	25,918	2	12,959
Lincoln	5,869	2	2,935
Logan	17,117	3	5,706
Mesa	38,906	4	9,727
Mineral	691		
Moffat	5,944	1	5,944
Montezuma	9,937	2	4,969
Montrose	15,024	3	5,008
Morgan	18,035	4	4,509
Otero	25,274	7	3,611
Ouray	2,089	1	2,089
Park	1,853	1	1,853
Phillips	4,907	2	2,454
Pitkin	1,629	1	1,629
Prowers	14,837	5	2,967
Pueblo	89,592	4	22,398
Rio Blanco	4,711	1	4,711
Rio Grande	12,639	2	6,320
Routt	8,896	1	8,896
Saguache	5,672	2	2,836
San Juan	1,459		
San Miguel	2,690	1	2,690
Sedgwick	5,080	1	5,080
Summit	1,130		
Teller	2,734	1	2,734
Washington	7,522	2	3,761
Weld	66,623	11	6,057
Yuma	10,823	4	2,706
CONNECTICUT			
Fairfield	504,342	48	10,507
Hartford	539,661	35	15,419
Litchfield	98,872	14	7,062
Middlesex	67,332	12	5,611
New Haven	545,784	35	15,594
New London	144,821	10	14,482
Tolland	44,709	2	22,355
Windham	61,759	6	10,293
DELAWARE			
Kent	37,867	14	2,705
New Castle	217,605	27	8,059
Sussex	61,137	17	3,596
DISTRICT OF COLUMBIA			
Washington	797,670	64	12,464

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
FLORIDA			
Alachua	57,026	6	9,504
Baker	6,313	1	6,313
Bay	42,689	3	14,230
Bradford	11,457	1	11,457
Brevard	23,653	3	7,884
Broward	83,933	7	11,990
Calhoun	7,922	1	7,922
Charlotte	4,286	1	4,286
Citrus	6,111	1	6,111
Clay	14,323	1	14,323
Collier	6,488	2	3,244
Columbia	18,216	3	6,072
Dade	495,084	18	27,505
De Soto	9,242	1	9,242
Dixie	3,928	1	3,928
Duval	304,029	10	30,403
Escambia	112,706	6	18,784
Flagler	3,367	1	3,367
Franklin	5,814	1	5,814
Gadsden	36,457	4	9,114
Gilchrist	3,499	1	3,499
Glades	2,199		
Gulf	7,460	2	3,730
Hamilton	8,981	1	8,981
Hardee	10,073	1	10,073
Hendry	6,051	1	6,051
Hernando	6,693	1	6,693
Highlands	13,636	2	6,818
Hillsborough	249,894	11	22,718
Holmes	13,988	1	13,988
Indian River	11,872	1	11,872
Jackson	34,645	5	6,929
Jefferson	10,413	1	10,413
Lafayette	3,440	1	3,440
Lake	36,340	7	5,191
Lee	23,404	2	11,702
Leon	51,590	4	12,898
Levy	10,637	3	3,546
Liberty	3,182		
Madison	14,197	2	7,099
Manatee	34,704	3	11,568
Marion	38,187	4	9,547
Martin	7,807	1	7,807
Monroe	29,957	1	29,957
Nassau	12,811	1	12,811
Okaloosa	27,533	3	9,178
Okeechobee	3,454	1	3,454
Orange	114,950	7	16,421
Osceola	11,406	2	5,703
Palm Beach	114,688	8	14,336
Pasco	20,529	2	10,265
Pinellas	159,249	9	17,694
Polk	123,997	12	10,3[illegible]8
Putnam	23,615	2	11,808
St. Johns	24,998	4	6,250
St. Lucie	20,180	2	10,090
Santa Rosa	18,554	1	18,554
Sarasota	28,827	4	7,207
Seminole	26,883	3	8,961
Sumter	11,330	2	5,665
Suwannee	16,986	3	5,662
Taylor	10,416	1	10,416
Union	8,906	1	8,906
Volusia	74,229	6	12,372
Wakulla	5,258		
Walton	14,725	2	7,363
Washington	11,888	1	11,888
GEORGIA			
Appling	14,013	2	7,007
Atkinson	7,368	3	2,456
Bacon	8,963	2	4,482
Baker	5,969	1	5,969
Baldwin	29,721	4	7,430
Banks	6,970		

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
GEORGIA—con.			
Barrow	13,150	1	13,150
Bartow	27,329	4	6,832
Ben Hill	14,891	3	4,964
Berrien	14,004	4	3,501
Bibb	113,560	4	28,390
Bleckley	9,255	2	4,628
Brantley	6,397	1	6,397
Brooks	18,139	3	6,046
Bryan	5,988	1	5,988
Bulloch	24,862	4	6,216
Burke	23,469	4	5,867
Butts	9,133	1	9,133
Calhoun	9,045	4	2,261
Camden	7,339	3	2,446
Candler	8,042	1	8,042
Carroll	34,084	5	6,817
Catoosa	15,137	1	15,137
Charlton	4,825	1	4,825
Chatham	150,946	16	9,434
Chattahoochee	12,195	2	6,098
Chattooga	21,178	1	21,178
Cherokee	20,782	4	5,196
Clarke	36,488	3	12,163
Clay	5,830	1	5,830
Clayton	22,026	1	22,026
Clinch	6,024	1	6,024
Cobb	61,748	6	10,291
Coffee	23,998	6	4,000
Colquitt	33,934	3	11,311
Columbia	9,499	1	9,499
Cook	12,242	4	3,061
Coweta	27,736	4	6,934
Crawford	6,083	1	6,083
Crisp	17,644	2	8,822
Dade	7,362	----------	----------
Dawson	3,707	----------	----------
Decatur	23,625	2	11,813
De Kalb	134,931	9	14,992
Dodge	17,869	4	4,467
Dooly	14,150	4	3,538
Dougherty	43,446	5	8,689
Douglas	12,195	1	12,195
Early	17,392	2	8,696
Echols	2,495	----------	----------
Effingham	9,123	1	9,123
Elbert	18,572	2	9,286
Emanuel	19,698	4	4,925
Evans	6,645	2	3,323
Fannin	15,162	1	15,162
Fayette	7,989	2	3,995
Floyd	62,917	3	20,972
Forsyth	10,995	1	10,995
Franklin	14,448	3	4,816
Fulton	467,354	30	15,578
Gilmer	9,918	1	9,918
Glascock	3,595	1	3,595
Glynn	29,160	3	9,720
Gordon	18,957	1	18,957
Grady	18,919	3	6,306
Greene	12,849	4	3,212
Gwinnett	32,375	5	6,475
Habersham	16,532	4	4,133
Hall	40,020	3	13,340
Hancock	11,034	2	5,517
Haralson	14,680	4	3,670
Harris	11,258	1	11,258
Hart	14,514	1	14,514
Heard	7,056	1	7,056
Henry	15,784	3	5,261
Houston	20,904	3	6,968
Irwin	11,981	2	5,991
Jackson	18,987	5	3,797
Jasper	7,483	3	2,494
Jeff Davis	9,332	1	9,332
Jefferson	18,833	4	4,708
Jenkins	10,298	1	10,298
Johnson	9,900	2	4,950

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
GEORGIA—con.			
Jones	7,536	2	3,768
Lamar	9,863	1	9,863
Lanier	5,168	1	5,168
Laurens	33,103	6	5,517
Lee	6,680	2	3,340
Liberty	8,467	1	8,467
Lincoln	6,492	1	6,492
Long	3,561	----------	----------
Lowndes	35,196	6	5,866
Lumpkin	6,581	1	6,581
McDuffie	11,445	2	5,723
McIntosh	6,007	1	6,007
Macon	14,188	5	2,838
Madison	12,233	3	4,078
Marion	6,516	1	6,516
Meriwether	20,589	5	4,118
Miller	9,020	2	4,510
Mitchell	22,293	4	5,573
Monroe	10,540	4	2,635
Montgomery	7,906	4	1,977
Morgan	11,919	3	3,973
Murray	10,702	1	10,702
Muscogee	117,437	11	10,676
Newton	20,242	2	10,121
Oconee	7,005	----------	----------
Oglethorpe	9,946	2	4,973
Paulding	11,733	1	11,733
Peach	11,693	2	5,847
Pickens	8,825	1	8,825
Pierce	11,097	3	3,699
Pike	8,447	3	2,816
Polk	30,653	3	10,218
Pulaski	8,793	3	2,931
Putnam	7,718	2	3,859
Quitman	3,014	----------	----------
Rabun	7,388	1	7,388
Randolph	13,813	2	6,907
Richmond	108,916	7	15,559
Rockdale	8,486	2	4,243
Schley	4,038	1	4,038
Screven	17,742	3	5,914
Seminole	7,896	2	3,948
Spalding	31,051	2	15,526
Stephens	16,602	1	16,602
Stewart	9,188	2	4,594
Sumter	24,195	3	8,065
Talbot	7,554	2	3,777
Taliaferro	4,512	2	2,256
Tattnall	15,889	4	3,972
Taylor	9,129	2	4,565
Telfair	13,239	5	2,648
Terrell	14,320	3	4,773
Thomas	33,903	8	4,238
Tift	22,624	4	5,656
Toombs	17,490	4	4,373
Towns	4,789	1	4,789
Treutlen	6,513	1	6,513
Troup	49,694	4	12,424
Turner	10,490	2	5,245
Twiggs	8,323	1	8,323
Union	7,325	1	7,325
Upson	25,108	1	25,108
Walker	38,223	2	19,112
Walton	20,230	4	5,058
Ware	30,282	2	15,141
Warren	8,792	1	8,792
Washington	21,089	3	7,030
Wayne	14,306	1	14,306
Webster	4,106	1	4,106
Wheeler	6,704	1	6,704
White	5,953	1	5,953
Whitfield	34,465	3	11,488
Wilcox	10,158	3	3,386
Wilkes	12,403	3	4,134
Wilkinson	9,785	3	3,262
Worth	19,419	2	9,710

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
IDAHO			
Ada	70, 649	8	8, 831
Adams	3, 347	1	3, 347
Bannock	41, 745	7	5, 964
Bear Lake	6, 834	1	6, 834
Benewah	6, 173	1	6, 173
Bingham	23, 271	4	5, 818
Blaine	5, 384	1	5, 384
Boise	1, 776		
Bonner	14, 853	2	7, 427
Bonneville	30, 210	3	10, 070
Boundary	5, 908	1	5, 908
Butte	2, 722	1	2, 722
Camas	1, 079		
Canyon	53, 597	6	8, 933
Caribou	5, 576	1	5, 576
Cassia	14, 629	3	4, 876
Clark	918		
Clearwater	8, 217	1	8, 217
Custer	3, 318	2	1, 659
Elmore	6, 687	2	3, 344
Franklin	9, 867	1	9, 867
Fremont	9, 351	2	4, 676
Gem	8, 730	1	8, 730
Gooding	11, 101	2	5, 551
Idaho	11, 423	2	5, 712
Jefferson	10, 495	1	10, 495
Jerome	12, 080	2	6, 040
Kootenai	24, 947	3	8, 316
Latah	20, 971	6	3, 495
Lemhi	6, 278	1	6, 278
Lewis	4, 208	2	2, 104
Lincoln	4, 256	2	2, 128
Madison	9, 156	2	4, 578
Minidoka	9, 785	1	9, 785
Nez Perce	22, 658	4	5, 665
Oneida	4, 387	2	2, 194
Owyhee	6, 307	3	2, 102
Payette	11, 921	2	5, 961
Power	3, 988	1	3, 988
Shoshone	22, 806	4	5, 702
Teton	3, 204	1	3, 204
Twin Falls	40, 979	5	8, 196
Valley	4, 270	2	2, 135
Washington	8, 576	1	8, 576
ILLINOIS			
Adams	64, 690	13	4, 976
Alexander	20, 316	2	10, 158
Bond	14, 157	4	3, 539
Boone	17, 070	4	4, 268
Brown	7, 132	3	2, 377
Bureau	37, 711	15	2, 514
Calhoun	6, 898	2	3, 449
Carroll	18, 976	8	2, 872
Cass	15, 097	5	3, 019
Champaign	106, 100	17	6, 241
Christian	38, 816	6	6, 469
Clark	17, 362	5	3, 472
Clay	17, 445	5	3, 489
Clinton	22, 594	11	2, 054
Coles	40, 328	6	6, 721
Cook	4, 508, 792	124	36, 361
Crawford	21, 137	5	4, 227
Cumberland	10, 496	3	3, 499
De Kalb	40, 781	12	3, 398
De Witt	16, 894	4	4, 224
Douglas	16, 706	6	2, 784
Du Page	154, 599	18	8, 589
Edgar	23, 407	5	4, 681
Edwards	9, 056	2	4, 528
Effingham	21, 675	6	3, 613
Fayette	24, 582	7	3, 512
Ford	15, 901	7	2, 272
Franklin	48, 685	7	6, 955
ILLINOIS—continued			
Fulton	43, 716	12	3, 643
Gallatin	9, 818	2	4, 909
Greene	18, 852	6	3, 142
Grundy	19, 217	6	3, 203
Hamilton	12, 256	3	4, 085
Hancock	25, 790	10	2, 579
Hardin	7, 530	3	2, 510
Henderson	8, 416	4	2, 104
Henry	46, 492	10	4, 649
Iroquois	32, 348	11	2, 941
Jackson	38, 124	11	3, 466
Jasper	12, 266	3	4, 089
Jefferson	35, 892	6	5, 982
Jersey	15, 264	2	7, 632
Jo Daviess	21, 459	8	2, 682
Johnson	8, 729	2	4, 365
Kane	150, 388	17	8, 846
Kankakee	73, 524	8	9, 191
Kendall	12, 115	4	3, 029
Knox	54, 366	7	7, 767
Lake	179, 097	19	9, 426
La Salle	100, 610	18	5, 589
Lawrence	20, 539	4	5, 135
Lee	36, 451	8	4, 556
Livingston	37, 809	15	2, 521
Logan	30, 671	12	2, 556
McDonough	28, 199	5	5, 640
McHenry	50, 656	13	3, 897
McLean	76, 577	20	3, 829
Macon	98, 853	8	12, 357
Macoupin	44, 210	14	3, 158
Madison	182, 307	18	10, 128
Marion	41, 700	7	5, 957
Marshall	13, 025	6	2, 171
Mason	15, 326	4	3, 832
Massac	13, 594	4	3, 399
Menard	9, 639	3	3, 213
Mercer	17, 374	5	3, 475
Monroe	13, 282	6	2, 214
Montgomery	32, 460	10	3, 246
Morgan	35, 568	6	5, 928
Moultrie	13, 171	5	2, 634
Ogle	33, 429	8	4, 179
Peoria	174, 347	15	11, 623
Perry	21, 684	4	5, 421
Piatt	13, 970	8	1, 746
Pike	22, 155	8	2, 769
Pope	5, 779	1	5, 779
Pulaski	13, 639	3	4, 546
Putnam	4, 746	3	1, 582
Randolph	31, 673	10	3, 167
Richland	16, 889	2	8, 445
Rock Island	133, 558	10	13, 356
St. Clair	205, 599	20	10, 300
Saline	33, 420	5	6, 684
Sangamon	131, 484	12	10, 957
Schuyler	9, 613	2	4, 807
Scott	7, 245	3	2, 415
Shelby	24, 434	7	3, 491
Stark	8, 721	4	2, 180
Stephenson	41, 595	10	4, 160
Tazewell	76, 165	11	6, 924
Union	20, 500	6	3, 417
Vermilion	87, 079	15	5, 805
Wabash	14, 651	2	7, 326
Warren	21, 981	6	3, 664
Washington	14, 460	8	1, 808
Wayne	20, 933	4	5, 233
White	20, 935	7	2, 998
Whiteside	49, 336	9	5, 481
Will	134, 336	14	9, 591
Williamson	48, 621	4	12, 152
Winnebago	152, 385	6	25, 398
Woodford	21, 335	9	2, 375

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
INDIANA			
Adams	22,395	3	7,465
Allen	182,903	10	18,290
Bartholomew	36,109	3	12,036
Benton	11,439	4	2,860
Blackford	13,988	2	6,994
Boone	23,950	6	3,992
Brown	6,172	1	6,172
Carroll	15,974	4	3,994
Cass	38,670	6	6,445
Clark	48,284	6	8,047
Clay	23,912	5	4,782
Clinton	29,619	8	3,702
Crawford	9,322	3	3,107
Daviess	26,689	6	4,448
Dearborn	25,136	7	3,591
Decatur	18,173	4	4,543
De Kalb	26,041	5	5,208
Delaware	90,091	8	11,261
Dubois	23,772	5	4,754
Elkhart	84,327	12	7,027
Fayette	23,416	3	7,805
Floyd	43,905	5	8,781
Fountain	17,799	6	2,967
Franklin	16,060	4	4,015
Fulton	16,523	5	3,305
Gibson	30,657	9	3,406
Grant	62,057	10	6,206
Greene	27,837	6	4,640
Hamilton	28,431	7	4,062
Hancock	20,304	6	3,384
Harrison	17,861	5	3,572
Hendricks	24,560	9	2,729
Henry	45,433	12	3,786
Howard	54,384	6	9,064
Huntington	31,302	6	5,217
Jackson	28,246	8	3,531
Jasper	17,015	5	3,403
Jay	23,119	6	3,853
Jefferson	21,613	5	4,323
Jennings	15,254	3	5,085
Johnson	26,261	8	3,283
Knox	43,313	9	4,813
Kosciusko	32,868	11	2,988
Lagrange	15,323	6	2,554
Lake	366,113	22	16,642
La Porte	76,740	9	8,527
Lawrence	34,363	5	6,873
Madison	103,798	9	11,533
Marion	549,047	48	11,438
Marshall	29,475	6	4,913
Martin	10,752	2	5,376
Miami	28,154	7	4,022
Monroe	49,469	5	9,894
Montgomery	29,097	12	2,425
Morgan	23,712	6	3,952
Newton	10,992	4	2,748
Noble	25,072	6	4,179
Ohio	4,230	2	2,115
Orange	16,863	4	4,216
Owen	11,751	2	5,876
Parke	15,647	4	3,912
Perry	17,397	3	5,799
Pike	15,015	5	3,003
Porter	39,562	6	6,594
Posey	19,571	5	3,914
Pulaski	12,457	4	3,114
Putnam	22,916	6	3,819
Randolph	27,157	11	2,469
Ripley	18,798	9	2,089
Rush	19,768	6	3,295
Saint Joseph	204,740	21	9,750
Scott	11,554	2	5,777
Shelby	28,016	5	5,603
Spencer	16,164	5	3,233
Starke	15,239	4	3,810
Steuben	17,062	4	4,266
INDIANA—con.			
Sullivan	23,641	5	4,728
Switzerland	7,577	3	2,526
Tippecanoe	73,529	6	12,255
Tipton	15,558	5	3,112
Union	6,399	2	3,200
Vanderburgh	158,363	8	19,795
Vermilion	19,448	4	4,862
Vigo	104,931	6	17,489
Wabash	28,995	4	7,249
Warren	8,510	2	4,255
Warrick	21,553	6	3,592
Washington	16,585	5	3,317
Wayne	68,514	8	8,564
Wells	19,583	3	6,528
White	18,001	7	2,572
Whitley	18,828	4	4,707
IOWA			
Adair	12,292	5	2,458
Adams	8,753	3	2,918
Allamakee	16,351	6	2,725
Appanoose	19,683	6	3,281
Audubon	11,579	3	3,860
Benton	22,656	15	1,510
Black Hawk	100,448	9	11,161
Boone	28,139	5	5,628
Bremer	18,884	8	2,361
Buchanan	21,927	10	2,193
Buena Vista	21,113	10	2,111
Butler	17,394	11	1,581
Calhoun	16,925	8	2,116
Carroll	23,065	12	1,922
Cass	18,532	6	3,089
Cedar	16,910	9	1,879
Cerro Gordo	46,053	9	5,117
Cherokee	19,052	9	2,117
Chickasaw	15,228	7	2,175
Clarke	9,369	2	4,685
Clay	18,103	9	2,011
Clayton	22,522	14	1,609
Clinton	49,664	12	4,139
Crawford	19,741	8	2,468
Dallas	23,661	12	1,972
Davis	9,959	3	3,320
Decatur	12,601	4	3,150
Delaware	17,734	8	2,217
Des Moines	42,056	7	6,008
Dickinson	12,756	4	3,189
Dubuque	71,337	11	6,485
Emmet	14,102	4	3,526
Fayette	28,294	13	2,176
Floyd	21,505	7	3,072
Franklin	16,268	6	2,711
Fremont	12,323	7	1,760
Greene	15,544	9	1,727
Grundy	13,722	8	1,715
Guthrie	15,197	9	1,689
Hamilton	19,660	8	2,458
Hancock	15,077	8	1,885
Hardin	22,218	12	1,852
Harrison	19,560	9	2,173
Henry	18,708	10	1,871
Howard	13,105	5	2,621
Humboldt	13,117	6	2,186
Ida	10,697	5	2,139
Iowa	15,835	6	2,639
Jackson	18,622	9	2,069
Jasper	32,305	11	2,937
Jefferson	15,696	4	3,924
Johnson	45,756	8	5,720
Jones	19,401	7	2,772
Keokuk	16,797	14	1,200
Kossuth	26,241	13	2,019
Lee	43,102	11	3,918
Linn	104,274	18	5,793
Louisa	11,101	5	2,220

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
IOWA—con.			
Lucas	12,069	4	3,017
Lyon	14,697	9	1,633
Madison	13,131	7	1,876
Mahaska	24,672	7	3,525
Marion	25,930	8	3,241
Marshall	35,611	9	3,957
Mills	14,064	6	2,344
Mitchell	13,945	7	1,992
Monona	16,303	8	2,038
Monroe	11,814	2	5,907
Montgomery	15,685	5	3,137
Muscatine	32,148	5	6,430
O'Brien	18,970	11	1,725
Osceola	10,181	5	2,036
Page	23,921	6	3,987
Palo Alto	15,891	8	1,986
Plymouth	23,252	11	2,114
Pocahontas	15,496	8	1,937
Polk	226,010	17	13,295
Pottawattamie	69,682	16	4,355
Poweshiek	19,344	8	2,418
Ringgold	9,528	3	3,176
Sac	17,518	10	1,752
Scott	100,698	13	7,746
Shelby	15,942	8	1,993
Sioux	26,381	12	2,198
Story	44,294	15	2,953
Tama	21,688	12	1,807
Taylor	12,420	6	2,070
Union	15,651	7	2,236
Van Buren	11,007	8	1,376
Wapello	47,397	5	9,479
Warren	17,758	8	2,220
Washington	19,557	11	1,778
Wayne	11,737	5	2,347
Webster	44,241	11	4,022
Winnebago	13,450	5	2,690
Winneshiek	21,639	7	3,091
Woodbury	103,917	22	4,724
Worth	11,068	6	1,845
Wright	19,652	9	2,184
KANSAS			
Allen	18,187	3	6,062
Anderson	10,267	5	2,053
Atchison	21,496	4	5,374
Barber	8,521	7	1,217
Barton	29,909	10	2,991
Bourbon	19,153	4	4,788
Brown	14,651	9	1,628
Butler	31,001	12	2,583
Chase	4,831	5	966
Chautauqua	7,376	5	1,475
Cherokee	25,144	7	3,592
Cheyenne	5,668	3	1,889
Clark	3,946	3	1,315
Clay	11,697	3	3,899
Cloud	16,104	8	2,013
Coffey	10,408	7	1,487
Comanche	3,888	4	972
Cowley	36,905	8	4,613
Crawford	40,231	10	4,023
Decatur	6,185	4	1,546
Dickinson	21,190	13	1,630
Doniphan	10,499	9	1,167
Douglas	34,086	4	8,522
Edwards	5,936	3	1,979
Elk	6,679	4	1,670
Ellis	19,043	4	4,761
Ellsworth	8,465	6	1,411
Finney	15,092	2	7,546
Ford	19,670	6	3,278
Franklin	19,928	8	2,491
Geary	21,671	2	10,836
KANSAS—con.			
Gove	4,447	2	2,224
Graham	5,020	5	1,004
Grant	4,638	1	4,638
Gray	4,894	3	1,631
Greeley	2,010	1	2,010
Greenwood	13,574	9	1,508
Hamilton	3,696	2	1,848
Harper	10,263	5	2,053
Harvey	21,698	8	2,712
Haskell	2,606	2	1,303
Hodgeman	3,310	2	1,655
Jackson	11,098	5	2,220
Jefferson	11,084	8	1,386
Jewell	9,698	7	1,385
Johnson	62,783	11	5,708
Kearney	3,492	1	3,492
Kingman	10,324	5	2,065
Kiowa	4,743	3	1,581
Labette	29,285	8	3,661
Lane	2,808	2	1,404
Leavenworth	42,361	7	6,052
Lincoln	6,643	6	1,107
Linn	10,053	8	1,257
Logan	4,206	2	2,103
Lyon	26,576	8	3,322
McPherson	23,670	13	1,821
Marion	16,307	10	1,631
Marshall	17,926	12	1,494
Meade	5,710	3	1,903
Miami	19,698	6	3,283
Mitchell	10,320	8	1,290
Montgomery	46,487	7	6,641
Morris	8,485	5	1,697
Morton	2,610	1	2,610
Nemaha	14,341	9	1,593
Neosho	20,348	6	3,391
Ness	6,322	6	1,054
Norton	8,808	4	2,202
Osage	12,811	5	2,562
Osborne	8,558	6	1,426
Ottawa	7,265	6	1,211
Pawnee	11,041	4	2,760
Phillips	9,273	5	1,855
Pottawatomie	12,344	6	2,057
Pratt	12,156	4	3,039
Rawlins	5,728	5	1,146
Reno	54,058	15	3,604
Republic	11,478	6	1,913
Rice	15,635	10	1,564
Riley	33,405	7	4,772
Rooks	9,043	4	2,261
Rush	7,231	8	904
Russell	13,406	5	2,681
Saline	33,409	8	4,176
Scott	4,921	2	2,461
Sedgwick	222,290	16	13,893
Seward	9,972	3	3,324
Shawnee	105,418	13	8,109
Sheridan	4,607	3	1,536
Sherman	7,373	2	3,687
Smith	8,846	5	1,769
Stafford	8,816	6	1,469
Stanton	2,263	1	2,263
Stevens	4,516	1	4,516
Sumner	23,646	13	1,819
Thomas	7,572	4	1,893
Trego	5,868	3	1,956
Wabaunsee	7,212	6	1,202
Wallace	2,508	1	2,508
Washington	12,977	10	1,298
Wichita	2,640	1	2,640
Wilson	14,815	3	4,938
Woodson	6,711	3	2,237
Wyandotte	165,318	19	8,701

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
KENTUCKY			
Adair	17,603	2	8,802
Allen	13,787	2	6,894
Anderson	8,984	3	2,995
Ballard	8,545	2	4,273
Barren	28,461	6	4,744
Bath	10,410	4	2,603
Bell	47,602	3	15,867
Boone	13,015	8	1,627
Bourbon	17,752	5	3,550
Boyd	49,949	3	16,650
Boyle	20,532	4	5,133
Bracken	8,424	4	2,106
Breathitt	19,964	1	19,964
Breckinridge	15,528	4	3,882
Bullitt	11,349	4	2,837
Butler	11,309	2	5,655
Caldwell	13,199	3	4,400
Calloway	20,147	3	6,716
Campbell	76,196	11	6,927
Carlisle	6,206	2	3,103
Carroll	8,517	3	2,839
Carter	22,559	3	7,520
Casey	17,446	3	5,815
Christian	42,359	4	10,590
Clark	18,898	4	4,725
Clay	23,116	2	11,558
Clinton	10,605	1	10,605
Crittenden	10,818	2	5,409
Cumberland	9,309	2	4,655
Daviess	57,241	4	14,310
Edmonson	9,376	2	4,688
Elliott	7,085	1	7,085
Estill	14,677	1	14,677
Fayette	100,746	7	14,392
Fleming	11,962	3	3,987
Floyd	53,500	3	17,833
Franklin	25,933	3	8,644
Fulton	13,668	3	4,556
Gallatin	3,969	4	992
Garrard	11,029	4	2,757
Grant	9,809	7	1,401
Graves	31,364	6	5,227
Grayson	17,063	4	4,266
Green	11,261	2	5,631
Greenup	24,887	2	12,444
Hancock	6,009	1	6,009
Hardin	50,312	7	7,187
Harlan	71,751	3	23,917
Harrison	13,736	4	3,434
Hart	15,321	3	5,107
Henderson	30,715	4	7,679
Henry	11,394	7	1,628
Hickman	7,778	2	3,889
Hopkins	38,815	6	6,469
Jackson	13,101	1	13,101
Jefferson	484,615	41	11,820
Jessamine	12,458	3	4,153
Johnson	23,846	2	11,923
Kenton	104,254	10	10,425
Knott	20,320	1	20,320
Knox	30,409	1	30,409
Larue	9,956	3	3,319
Laurel	25,797	2	12,899
Lawrence	14,418	2	7,209
Lee	8,739	2	4,370
Leslie	15,537	1	15,537
Letcher	39,522	2	19,761
Lewis	13,520	1	13,520
Lincoln	18,668	6	3,111
Livingston	7,184	3	2,395
Logan	22,335	6	3,723
Lyon	6,853	2	3,427
McCracken	49,137	3	16,379
McCreary	16,660	1	16,660
McLean	10,021	4	2,505
Madison	31,179	6	5,197
KENTUCKY—con.			
Magoffin	13,839	1	13,839
Marion	17,212	5	3,442
Marshall	13,387	3	4,462
Martin	11,677	1	11,677
Mason	18,486	5	3,697
Meade	9,422	1	9,422
Menifee	4,798	----------	----------
Mercer	14,643	3	4,881
Metcalfe	9,851	2	4,926
Monroe	13,770	4	3,443
Montgomery	13,025	4	3,256
Morgan	13,624	1	13,624
Muhlenberg	32,501	3	10,834
Nelson	19,521	6	3,254
Nicholas	7,532	3	2,511
Ohio	20,840	6	3,473
Oldham	11,018	3	3,673
Owen	9,755	6	1,626
Owsley	7,324	1	7,324
Pendleton	9,610	3	3,203
Perry	46,566	2	23,283
Pike	81,154	3	27,051
Powell	6,812	1	6,812
Pulaski	38,452	5	7,690
Robertson	2,881	1	2,881
Rockcastle	13,925	2	6,963
Rowan	12,708	2	6,354
Russell	13,717	2	6,859
Scott	15,141	5	3,028
Shelby	17,912	7	2,559
Simpson	11,678	1	11,678
Spencer	6,157	1	6,157
Taylor	14,403	2	7,202
Todd	12,890	3	4,297
Trigg	9,683	1	9,683
Trimble	5,148	2	2,574
Union	14,893	6	2,482
Warren	42,758	5	8,552
Washington	12,777	4	3,194
Wayne	16,475	2	8,238
Webster	15,555	6	2,593
Whitley	31,940	5	6,388
Wolfe	7,615	1	7,615
Woodford	11,212	3	3,737
LOUISIANA			
Acadia	46,994	6	7,832
Allen	18,752	3	6,251
Ascension	22,336	3	7,445
Assumption	17,241	1	17,241
Avoyelles	37,912	5	7,582
Beauregard	17,712	2	8,856
Bienville	19,088	4	4,772
Bossier	36,956	4	9,239
Caddo	174,679	17	10,275
Calcasieu	89,485	6	14,914
Caldwell	10,212	2	5,106
Cameron	6,235	----------	----------
Catahoula	11,738	3	3,913
Claiborne	25,055	2	12,528
Concordia	14,347	2	7,174
De Soto	24,577	5	4,915
East Baton Rouge	156,485	8	19,561
East Carroll	16,295	2	8,148
East Feliciana	19,087	3	6,362
Evangeline	31,904	2	15,952
Franklin	29,418	4	7,355
Grant	14,218	2	7,109
Iberia	40,283	4	10,071
Iberville	26,646	4	6,662
Jackson	15,413	3	5,138
Jefferson	102,691	3	34,230
Jefferson Davis	26,359	5	5,272
Lafayette	56,957	2	28,479
La Fourche	41,703	5	8,341

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
LOUISIANA—con.			
La Salle	12,692	4	3,173
Lincoln	25,426	4	6,357
Livingston	19,799	2	9,900
Madison	17,444	1	17,444
Morehouse	32,059	5	6,412
Natchitoches	37,744	4	9,436
Orleans	567,257	28	20,259
Ouachita	74,276	5	14,855
Plaquemines	14,225	-------	-------
Pointe Coupee	21,820	1	21,820
Rapides	90,112	7	12,873
Red River	12,092	1	12,092
Richland	26,653	2	13,327
Sabine	20,839	3	6,946
St. Bernard	11,089	1	11,089
St. Charles	13,297	2	6,649
St. Helena	8,997	1	8,997
St. James	15,351	2	7,676
St. John the Baptist	14,840	1	14,840
St. Landry	78,366	8	9,796
St. Martin	26,315	2	13,158
St. Mary	35,804	4	8,951
St. Tammany	26,884	5	5,377
Tangipahoa	53,053	6	8,842
Tensas	13,151	3	4,384
Terrebonne	43,131	2	21,566
Union	19,089	3	6,363
Vermilion	36,865	6	6,144
Vernon	18,956	3	6,319
Washington	38,265	5	7,653
Webster	35,623	4	8,906
West Baton Rouge	11,561	1	11,561
West Carroll	17,042	2	8,521
West Feliciana	10,042	1	10,042
Winn	16,085	1	16,085
MAINE			
Androscoggin	83,594	10	8,359
Aroostook	96,039	15	6,403
Cumberland	169,201	15	11,280
Franklin	20,682	4	5,171
Hancock	32,105	8	4,013
Kennebec	83,881	9	9,320
Knox	28,121	7	4,017
Lincoln	18,004	4	4,501
Oxford	44,221	9	4,913
Penobscot	108,198	14	7,728
Piscataquis	18,617	4	4,654
Sagadahoc	20,911	4	5,228
Somerset	39,785	4	9,946
Waldo	21,687	4	5,422
Washington	35,187	7	5,027
York	93,541	16	5,846
MARYLAND			
Allegany	89,484	12	7,457
Anne Arundel	111,187	7	15,884
Baltimore	269,362	22	12,244
Baltimore City	940,205	67	14,033
Calvert	12,272	3	4,091
Caroline	18,198	7	2,600
Carroll	44,504	16	2,782
Cecil	33,320	9	3,702
Charles	23,363	5	4,673
Dorchester	27,780	6	4,630
Frederick	62,158	15	4,144
Garrett	21,206	4	5,302
Harford	52,014	8	6,502
Howard	23,064	3	7,688
Kent	13,665	8	1,708
Montgomery	163,749	18	9,097
Prince Georges	193,799	20	9,690
Queen Annes	14,491	5	2,898
St. Marys	28,953	4	7,238
MARYLAND—con.			
Somerset	20,710	5	4,142
Talbot	19,368	7	2,767
Washington	78,726	13	6,056
Wicomico	39,541	10	3,954
Worcester	23,124	9	2,569
MASSACHUSETTS			
Barnstable	46,381	10	4,638
Berkshire	130,941	12	10,912
Bristol	380,849	19	20,045
Dukes	5,555	3	1,852
Essex	521,093	39	13,361
Franklin	52,578	7	7,511
Hampden	367,507	26	14,135
Hampshire	86,472	5	17,294
Middlesex	1,059,875	77	13,765
Nantucket	3,417	1	3,417
Norfolk	391,007	36	10,861
Plymouth	189,457	15	12,630
Suffolk	886,058	77	11,507
Worcester	543,094	32	16,972
MICHIGAN			
Alcona	5,856	1	5,856
Alger	10,007	3	3,336
Allegan	47,493	9	5,277
Alpena	22,189	2	11,095
Antrim	10,721	4	2,680
Arenac	9,644	2	4,822
Baraga	8,037	1	8,037
Barry	26,183	5	5,237
Bay	88,461	10	8,846
Benzie	8,306	3	2,769
Berrien	115,702	13	8,900
Branch	30,202	5	6,040
Calhoun	120,813	11	10,983
Cass	28,185	4	7,046
Charlevoix	13,475	4	3,369
Cheboygan	13,731	2	6,866
Chippewa	29,206	5	5,841
Clare	10,253	3	3,418
Clinton	31,195	7	4,456
Crawford	4,151	1	4,151
Delta	32,913	6	5,486
Dickinson	24,844	3	8,281
Eaton	40,023	8	5,003
Emmet	16,534	3	5,511
Genesee	270,963	23	11,781
Gladwin	9,451	3	3,150
Gogebic	27,053	4	6,763
Grand Traverse	28,598	2	14,299
Gratiot	33,429	8	4,179
Hillsdale	31,916	7	4,559
Houghton	39,771	6	6,629
Huron	33,149	14	2,368
Ingham	172,941	18	9,608
Ionia	38,158	7	5,451
Iosco	10,906	2	5,453
Iron	17,692	5	3,538
Isabella	28,964	7	4,138
Jackson	107,925	7	15,418
Kalamazoo	126,707	10	12,671
Kalkaska	4,597	1	4,597
Kent	288,292	40	7,207
Keweenaw	2,918	1	2,918
Lake	5,257	2	2,629
Lapeer	35,794	6	5,966
Leelanau	8,647	2	4,324
Lenawee	64,629	15	4,309
Livingston	26,725	4	6,681
Luce	8,147	1	8,147
Mackinac	9,287	1	9,287
Macomb	184,961	14	13,212
Manistee	18,524	2	9,262

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
MICHIGAN—con.			
Marquette	47,654	6	7,942
Mason	20,474	4	5,119
Mecosta	18,968	7	2,710
Menominee	25,299	4	6,325
Midland	35,662	3	11,887
Missaukee	7,458	2	3,729
Monroe	75,666	10	7,567
Montcalm	31,013	10	3,101
Montmorency	4,125	2	2,063
Muskegon	121,545	8	15,193
Newaygo	21,567	6	3,595
Oakland	396,001	24	16,500
Oceana	16,105	4	4,026
Ogemaw	9,345	2	4,673
Ontonagon	10,282	3	3,427
Osceola	13,797	3	4,599
Oscoda	3,134	1	3,134
Otsego	6,435	1	6,435
Ottawa	73,751	8	9,219
Presque Isle	11,996	3	3,999
Roscommon	5,916	2	2,958
Saginaw	153,515	11	13,956
St. Clair	91,599	12	7,633
St. Joseph	35,071	9	3,897
Sanilac	30,837	7	4,405
Schoolcraft	9,148	2	4,574
Shiawassee	45,967	9	5,107
Tuscola	38,258	14	2,733
Van Buren	39,184	9	4,354
Washtenaw	134,606	14	9,615
Wayne	2,435,235	151	16,127
Wexford	18,628	3	6,209
MINNESOTA			
Aitkin	14,269	2	7,135
Anoka	35,556	4	8,889
Becker	24,691	6	4,115
Beltrami	24,850	5	4,970
Benton	15,862	5	3,172
Big Stone	9,574	4	2,394
Blue Earth	38,211	12	3,184
Brown	25,878	9	2,875
Carlton	24,534	4	6,134
Carver	18,177	11	1,652
Cass	19,099	6	3,183
Chippewa	16,718	6	2,786
Chisago	12,610	8	1,576
Clay	30,202	7	4,315
Clearwater	10,158	3	3,386
Cook	2,880	1	2,880
Cottonwood	15,759	6	2,627
Crow Wing	30,676	5	6,135
Dakota	49,055	11	4,460
Dodge	12,609	6	2,102
Douglas	21,215	8	2,652
Faribault	23,847	13	1,834
Fillmore	24,401	15	1,627
Freeborn	34,447	16	2,153
Goodhue	32,080	12	2,673
Grant	9,532	7	1,362
Hennepin	669,565	39	17,168
Houston	14,419	7	2,060
Hubbard	11,084	3	3,695
Isanti	12,094	4	3,024
Itasca	33,141	10	3,314
Jackson	16,322	7	2,332
Kanabec	9,204	2	4,602
Kandiyohi	28,521	12	2,377
Kittson	9,622	2	4,811
Koochiching	16,848	5	3,370
Lac Qui Parle	14,508	6	2,418
Lake	7,768	2	3,884
Lake of the Woods	4,904	2	2,452
Le Sueur	19,055	10	1,906
Lincoln	10,182	4	2,546
MINNESOTA—con.			
Lyon	22,203	8	2,775
McLeod	22,185	9	2,465
Mahnomen	6,998	2	3,499
Marshall	16,208	6	2,701
Martin	25,543	12	2,129
Meeker	18,941	8	2,368
Mille Lacs	15,109	4	3,777
Morrison	25,738	7	3,677
Mower	42,171	12	3,514
Murray	14,778	5	2,956
Nicollet	20,952	6	3,492
Nobles	22,382	9	2,487
Norman	12,851	8	1,606
Olmsted	47,980	7	6,854
Otter Tail	51,094	14	3,650
Pennington	12,953	2	6,477
Pine	18,203	8	2,275
Pipestone	13,995	5	2,799
Polk	35,863	9	3,985
Pope	12,821	5	2,564
Ramsey	353,190	23	15,356
Red Lake	6,805	3	2,268
Redwood	22,113	11	2,010
Renville	23,915	11	2,174
Rice	36,202	9	4,022
Rock	11,271	7	1,610
Roseau	14,491	5	2,898
St. Louis	205,205	27	7,600
Scott	16,459	6	2,743
Sherburne	10,637	4	2,659
Sibley	15,829	7	2,261
Stearns	70,409	24	2,934
Steele	21,127	9	2,347
Stevens	11,114	5	2,223
Swift	15,820	7	2,260
Todd	25,410	7	3,630
Traverse	8,064	3	2,688
Wabasha	16,883	7	2,412
Wadena	12,716	5	2,543
Waseca	14,933	6	2,489
Washington	34,356	9	3,817
Watonwan	13,872	9	1,541
Wilkin	10,542	4	2,636
Winona	39,753	7	5,679
Wright	27,693	12	2,308
Yellow Medicine	16,231	6	2,705
MISSISSIPPI			
Adams	32,256	2	16,128
Alcorn	27,158	3	9,053
Amite	19,261	2	9,631
Attala	26,652	3	8,884
Benton	8,793	2	4,397
Bolivar	63,004	11	5,728
Calhoun	18,369	3	6,123
Carroll	15,499	3	5,166
Chickasaw	18,951	4	4,738
Choctaw	11,009	2	5,505
Claiborne	11,944	2	5,972
Clarke	19,362	3	6,454
Clay	17,757	2	8,879
Coahoma	49,361	5	9,872
Copiah	30,493	5	6,099
Covington	16,036	2	8,018
De Soto	24,599	2	12,300
Forrest	45,055	2	22,528
Franklin	10,929	1	10,929
George	10,012	1	10,012
Greene	8,215	2	4,108
Grenada	18,830	2	9,415
Hancock	11,891	2	5,946
Harrison	84,073	6	14,012
Hinds	142,164	15	9,478
Holmes	33,301	8	4,163
Humphreys	23,115	2	11,558

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
MISSISSIPPI—con.			
Issaquena	4,966		
Itawamba	17,216	1	17,216
Jackson	31,401	5	6,280
Jasper	18,912	3	6,304
Jefferson	11,306	1	11,306
Jefferson Davis	15,500	1	15,500
Jones	57,235	3	19,078
Kemper	15,893	2	7,947
Lafayette	22,798	2	11,399
Lamar	13,225	3	4,408
Lauderdale	64,171	3	21,390
Lawrence	12,639	3	4,213
Leake	21,610	3	7,203
Lee	38,237	7	5,462
Leflore	51,813	4	12,953
Lincoln	27,899	2	13,950
Lowndes	37,852	5	7,570
Madison	33,860	3	11,287
Marion	23,967	2	11,984
Marshall	25,106	5	5,021
Monroe	36,543	4	9,136
Montgomery	14,470	4	3,618
Neshoba	25,730	2	12,865
Newton	22,681	4	5,670
Noxubee	20,022	4	5,006
Oktibbeha	24,569	3	8,190
Panola	31,271	6	5,212
Pearl River	20,641	3	6,880
Perry	9,108	2	4,554
Pike	35,137	6	5,856
Pontotoc	19,994	4	4,999
Prentiss	19,810	3	6,603
Quitman	25,885	3	8,628
Rankin	28,881	3	9,627
Scott	21,681	5	4,336
Sharkey	12,903	2	6,452
Simpson	21,819	2	10,910
Smith	16,740	3	5,580
Stone	6,264	1	6,264
Sunflower	56,031	9	6,226
Tallahatchie	30,486	5	6,097
Tate	18,011	3	6,004
Tippah	17,522	4	4,381
Tishomingo	15,544	3	5,181
Tunica	21,664	1	21,664
Union	20,262	2	10,131
Walthall	15,563	1	15,563
Warren	39,616	2	19,808
Washington	70,504	6	11,751
Wayne	17,010	1	17,010
Webster	11,607	3	3,869
Wilkinson	14,116	2	7,058
Winston	22,231	2	11,116
Yalobusha	15,191	4	3,798
Yazoo	35,712	2	17,856
MISSOURI			
Adair	19,689	3	6,563
Andrew	11,727	2	5,864
Atchison	11,127	5	2,225
Audrain	23,829	5	4,766
Barry	21,755	8	2,719
Barton	12,678	5	2,536
Bates	17,534	7	2,505
Benton	9,080	5	1,816
Bollinger	11,019	2	5,510
Boone	48,432	6	8,072
Buchanan	96,826	13	7,448
Butler	37,707	3	12,569
Caldwell	9,929	4	2,482
Callaway	23,316	3	7,772
Camden	7,861	5	1,572
Cape Girardeau	38,397	5	7,679
Carroll	15,589	6	2,598
Carter	4,777	2	2,389
MISSOURI—con.			
Cass	19,325	10	1,933
Cedar	10,663	2	5,332
Chariton	14,944	6	2,491
Christian	12,412	4	3,103
Clark	9,003	3	3,001
Clay	45,221	9	5,025
Clinton	11,726	4	2,932
Cole	35,464	5	7,093
Cooper	16,608	7	2,373
Crawford	11,615	3	3,872
Dade	9,324	2	4,662
Dallas	10,392	2	5,196
Daviess	11,180	5	2,236
De Kalb	8,047	7	1,150
Dent	10,936	4	2,734
Douglas	12,638	1	12,638
Dunklin	45,329	7	6,476
Franklin	36,046	11	3,277
Gasconade	12,342	4	3,086
Gentry	11,036	3	3,679
Greene	104,823	6	17,471
Grundy	13,220	4	3,305
Harrison	14,107	6	2,351
Henry	20,043	9	2,227
Hickory	5,387	1	5,387
Holt	9,833	7	1,405
Howard	11,857	4	2,964
Howell	22,725	4	5,681
Iron	9,458	3	3,153
Jackson	541,035	39	13,873
Jasper	79,106	12	6,592
Jefferson	38,007	9	4,223
Johnson	20,716	6	3,453
Knox	7,617	1	7,617
Laclede	19,010	3	6,337
Lafayette	25,272	9	2,808
Lawrence	23,420	4	5,855
Lewis	10,733	5	2,147
Lincoln	13,478	6	2,246
Linn	18,865	8	2,358
Livingston	16,532	4	4,133
McDonald	14,144	4	3,536
Macon	18,332	4	4,583
Madison	10,380	2	5,190
Maries	7,423	2	3,712
Marion	29,765	4	7,441
Mercer	7,235	3	2,412
Miller	13,734	6	2,289
Mississippi	22,551	2	11,276
Moniteau	10,840	5	2,168
Monroe	11,314	4	2,829
Montgomery	11,555	6	1,926
Morgan	10,207	2	5,104
New Madrid	39,444	5	7,889
Newton	28,240	5	5,648
Nodaway	24,033	5	4,807
Oregon	11,978	2	5,989
Osage	11,301	4	2,825
Ozark	8,856	1	8,856
Pemiscot	45,624	5	9,125
Perry	14,890	5	2,978
Pettis	31,577	6	5,263
Phelps	21,504	3	7,168
Pike	16,844	5	3,369
Platte	14,973	7	2,139
Polk	16,062	4	4,016
Pulaski	10,392	5	2,078
Putnam	9,166	1	9,166
Ralls	8,686	3	2,895
Randolph	22,918	6	3,820
Ray	15,932	5	3,186
Reynolds	6,918	2	3,459
Ripley	11,414	1	11,414
St. Charles	29,834	7	4,262
St. Clair	10,482	3	3,494
St. Francois	35,276	5	7,055

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
MISSOURI—con.			
Ste. Genevieve	11,237	4	2,809
St. Louis	406,349	25	16,254
St. Louis City	856,796	31	27,639
Saline	26,694	5	5,339
Schuyler	5,760	3	1,920
Scotland	7,332	2	3,666
Scott	32,842	5	6,568
Shannon	8,377	2	4,189
Shelby	9,730	5	1,946
Stoddard	33,463	4	8,366
Stone	9,748	1	9,748
Sullivan	11,299	5	2,260
Taney	9,863	2	4,932
Texas	18,992	6	3,165
Vernon	22,685	7	3,241
Warren	7,666	3	2,555
Washington	14,689	3	4,896
Wayne	10,514	1	10,514
Webster	15,072	4	3,768
Worth	5,120	2	2,560
Wright	15,834	4	3,959
MONTANA			
Beaverhead	6,417	2	3,209
Big Horn	9,799	2	4,900
Blaine	8,473	3	2,824
Broadwater	2,887	1	2,887
Carbon	10,106	4	2,527
Carter	2,785	1	2,785
Cascade	52,408	5	10,482
Chouteau	6,908	3	2,303
Custer	12,623	2	6,312
Daniels	3,928	1	3,928
Dawson	9,047	3	3,016
Deerlodge	16,529	1	16,529
Fallon	3,647	2	1,824
Fergus	13,963	3	4,654
Flathead	31,412	5	6,282
Gallatin	21,718	5	4,344
Garfield	2,154	---	---
Glacier	9,633	2	4,817
Golden Valley	1,339	---	---
Granite	2,765	1	2,765
Hill	14,281	2	7,141
Jefferson	4,005	1	4,005
Judith Basin	3,204	1	3,204
Lake	13,767	3	4,589
Lewis and Clark	24,418	2	12,209
Liberty	2,168	1	2,168
Lincoln	8,672	1	8,672
McCone	3,246	1	3,246
Madison	5,906	2	2,953
Meagher	2,039	1	2,039
Mineral	2,062	---	---
Missoula	34,982	2	17,491
Musselshell	5,392	1	5,392
Park	11,974	2	5,987
Petroleum	1,025	---	---
Phillips	6,343	1	6,343
Pondera	6,429	2	3,215
Powder River	2,680	1	2,680
Powell	6,258	1	6,258
Prairie	2,361	1	2,361
Ravalli	13,021	4	3,255
Richland	10,346	3	3,449
Roosevelt	9,550	4	2,388
Rosebud	6,529	1	6,529
Sanders	6,952	2	3,476
Sheridan	6,628	2	3,314
Silverbow	47,992	3	15,997
Stillwater	5,345	1	5,345
Sweet Grass	3,619	1	3,619
Teton	7,130	2	3,565
Toole	6,859	2	3,430
Treasure	1,406	1	1,406
MONTANA—con.			
Valley	11,320	3	3,773
Wheatland	3,162	2	1,581
Wibaux	1,904	1	1,904
Yellowstone	55,763	6	9,294
Yellowstone National Park	58	---	---
NEBRASKA			
Adams	28,855	4	7,214
Antelope	11,624	6	1,937
Arthur	803	---	---
Banner	1,325	---	---
Blaine	1,203	1	1,203
Boone	10,721	6	1,787
Box Butte	12,279	3	4,093
Boyd	4,911	4	1,228
Brown	5,164	2	2,582
Buffalo	25,134	8	3,142
Burt	11,536	5	2,307
Butler	11,432	5	2,286
Cass	16,361	8	2,045
Cedar	13,843	5	2,769
Chase	5,176	4	1,294
Cherry	8,397	6	1,400
Cheyenne	12,081	4	3,020
Clay	8,700	6	1,450
Colfax	10,010	4	2,503
Cuming	12,994	7	1,856
Custer	19,170	10	1,917
Dakota	10,401	1	10,401
Dawes	9,708	3	3,236
Dawson	19,393	9	2,155
Deuel	3,330	2	1,665
Dixon	9,129	5	1,826
Dodge	26,265	7	3,752
Douglas	281,020	15	18,735
Dundy	4,354	1	4,354
Fillmore	9,610	6	1,602
Franklin	7,096	3	2,365
Frontier	5,282	3	1,761
Furnas	9,385	7	1,341
Gage	28,052	11	2,550
Garden	4,114	3	1,371
Garfield	2,912	1	2,912
Gosper	2,734	2	1,367
Grant	1,057	1	1,057
Greeley	5,575	4	1,394
Hall	32,186	7	4,598
Hamilton	8,778	4	2,195
Harlan	7,189	4	1,797
Hayes	2,404	1	2,404
Hitchcock	5,867	4	1,467
Holt	14,859	7	2,123
Hooker	1,061	1	1,061
Howard	7,226	5	1,445
Jefferson	13,623	5	2,725
Johnson	7,251	4	1,813
Kearney	6,409	5	1,282
Keith	7,449	4	1,862
Keyapaha	2,160	1	2,160
Kimball	4,283	1	4,283
Knox	14,820	7	2,117
Lancaster	119,742	14	8,553
Lincoln	27,380	6	4,563
Logan	1,357	1	1,357
Loup	1,348	1	1,348
McPherson	825	---	---
Madison	24,338	8	3,042
Merrick	8,812	4	2,203
Morrill	8,263	2	4,132
Nance	6,512	3	2,171
Nemaha	10,973	4	2,743
Nuckolls	9,609	5	1,922
Otoe	17,056	8	2,132
Pawnee	6,744	6	1,124

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
NEBRASKA—con.			
Perkins	4,809	3	1,603
Phelps	9,048	4	2,262
Pierce	9,405	3	3,135
Platte	19,910	5	3,982
Polk	8,044	5	1,609
Redwillow	12,977	3	4,326
Richardson	16,886	6	2,814
Rock	3,026	1	3,026
Saline	14,046	10	1,405
Sarpy	15,693	2	7,847
Saunders	16,923	13	1,302
Scotts Bluff	33,939	7	4,848
Seward	13,155	6	2,193
Sheridan	9,539	5	1,908
Sherman	6,421	2	3,211
Sioux	3,124	1	3,124
Stanton	6,387	3	2,129
Thayer	10,563	8	1,320
Thomas	1,206	2	603
Thurston	8,590	2	4,295
Valley	7,252	4	1,813
Washington	11,511	3	3,837
Wayne	10,129	5	2,026
Webster	7,395	3	2,465
Wheeler	1,526	1	1,526
York	14,346	9	1,594
NEVADA			
Churchill	6,161	1	6,161
Clark	48,289	3	16,096
Douglas	2,029	1	2,029
Elko	11,654	3	3,885
Esmeralda	614	------	------
Eureka	896	1	896
Humboldt	4,838	1	4,838
Lander	1,850	2	925
Lincoln	3,837	1	3,837
Lyon	3,679	1	3,679
Mineral	5,560	1	5,560
Nye	3,101	1	3,101
Ormsby	4,172	1	4,172
Pershing	3,103	1	3,103
Storey	671	------	------
Washoe	50,205	6	8,368
White Pine	9,424	3	3,141
NEW HAMPSHIRE			
Belknap	26,632	5	5,326
Carroll	15,868	3	5,289
Cheshire	38,811	5	7,762
Coos	35,932	10	3,593
Grafton	47,923	10	4,792
Hillsboro	156,987	14	11,213
Merrimack	63,022	9	7,002
Rockingham	70,059	7	10,008
Strafford	51,567	9	5,730
Sullivan	26,441	5	5,288
NEW JERSEY			
Atlantic	132,879	14	9,491
Bergen	536,310	52	10,314
Burlington	135,926	20	6,796
Camden	300,287	22	13,649
Cape May	36,924	10	3,692
Cumberland	88,727	7	12,675
Essex	900,887	80	11,261
Gloucester	91,719	14	6,551
Hudson	646,136	61	10,592
Hunterdon	42,689	12	3,557
Mercer	229,412	21	10,924
Middlesex	264,659	23	11,507
Monmouth	223,306	30	7,444
Morris	164,613	15	10,974
NEW JERSEY—con.			
Ocean	56,117	10	5,612
Passaic	337,308	29	11,631
Salem	49,615	9	5,513
Somerset	98,740	9	10,971
Sussex	34,308	7	4,901
Union	397,559	34	11,693
Warren	54,407	10	5,441
NEW MEXICO			
Bernalillo	146,014	7	20,859
Catron	3,517	------	------
Chaves	39,884	3	13,295
Colfax	16,356	3	5,452
Curry	23,174	3	7,725
De Baca	3,460	1	3,460
Dona Ana	39,044	3	13,015
Eddy	40,421	4	10,105
Grant	21,561	2	10,781
Guadalupe	6,756	2	3,378
Harding	3,034	1	3,034
Hidalgo	5,110	1	5,110
Lea	30,577	6	5,096
Lincoln	7,371	1	7,371
Los Alamos	10,467	1	10,467
Luna	8,640	1	8,640
McKinley	26,920	2	13,460
Mora	8,604	1	8,604
Otero	14,709	3	4,903
Quay	13,912	4	3,478
Rio Arriba	24,543	3	8,181
Roosevelt	16,391	2	8,196
Sandoval	12,427	------	------
San Juan	18,116	2	9,058
San Miguel	26,411	2	13,206
Santa Fe	37,582	2	18,791
Sierra	7,174	1	7,174
Socorro	9,665	1	9,665
Taos	17,303	1	17,303
Torrance	8,060	------	------
Union	7,375	1	7,375
Valencia	22,574	2	11,287
NEW YORK			
Albany	238,211	22	10,828
Allegany	43,395	17	2,553
Bronx	1,444,903	64	22,577
Broome	184,664	14	13,190
Cattaraugus	77,605	14	5,543
Cayuga	70,008	11	6,364
Chautauqua	133,457	18	7,414
Chemung	86,797	7	12,400
Chenango	39,196	10	3,920
Clinton	53,583	5	10,717
Columbia	43,262	6	7,210
Cortland	37,073	5	7,415
Delaware	44,185	13	3,399
Dutchess	136,814	18	7,601
Erie	895,620	102	8,781
Essex	34,973	7	4,996
Franklin	44,834	7	6,405
Fulton	50,968	7	7,281
Genesee	47,607	8	5,951
Greene	28,599	7	4,086
Hamilton	4,051	1	4,051
Herkimer	61,268	12	5,106
Jefferson	85,272	15	5,685
Kings	2,716,347	113	24,038
Lewis	22,447	7	3,207
Livingston	40,182	10	4,018
Madison	46,316	8	5,790
Monroe	484,877	38	12,760
Montgomery	59,550	9	6,617
Nassau	666,252	62	10,746
New York County	1,936,540	280	6,916

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
NEW YORK—con.			
Niagara	189,986	12	15,832
Oneida	222,334	18	12,352
Onondaga	340,875	31	10,996
Ontario	59,922	10	5,992
Orange	150,583	23	6,547
Orleans	29,833	4	7,458
Oswego	76,974	10	7,697
Otsego	50,615	13	3,893
Putnam	19,301	4	4,825
Queens	1,546,294	87	17,773
Rensselaer	131,666	10	13,167
Richmond	191,015	11	17,365
Rockland	89,009	11	8,092
St. Lawrence	97,724	19	5,143
Saratoga	74,964	7	10,709
Schenectady	142,650	11	12,968
Schoharie	22,830	5	4,566
Schuyler	14,154	4	3,539
Seneca	29,211	5	5,842
Steuben	91,424	17	5,378
Suffolk	272,359	45	6,052
Sullivan	40,600	11	3,691
Tioga	30,087	7	4,298
Tompkins	59,186	5	11,837
Ulster	92,662	14	6,619
Warren	39,033	8	4,879
Washington	47,064	8	5,883
Wayne	56,879	11	5,171
Westchester	622,983	62	10,048
Wyoming	32,758	11	2,978
Yates	17,614	4	4,404
NORTH CAROLINA			
Alamance	71,220	7	10,174
Alexander	14,554	2	7,277
Alleghany	8,155	1	8,155
Anson	26,781	5	5,356
Ashe	21,878	2	10,939
Avery	13,352	2	6,676
Beaufort	37,134	5	7,427
Bertie	26,439	4	6,610
Bladen	29,703	3	9,901
Brunswick	19,238	2	9,619
Buncombe	124,403	12	10,367
Burke	45,518	3	15,173
Cabarrus	63,783	6	10,631
Caldwell	43,352	4	10,838
Camden	5,223	----------	--------
Carteret	23,059	2	11,530
Caswell	20,870	1	20,870
Catawba	61,794	7	8,828
Chatham	25,392	3	8,464
Cherokee	18,294	2	9,147
Chowan	12,540	1	12,540
Clay	6,006	1	6,006
Cleveland	64,357	5	12,871
Columbus	50,621	5	10,124
Craven	48,823	6	8,137
Cumberland	96,006	6	16,001
Currituck	6,201	1	6,201
Dare	5,405	1	5,405
Davidson	62,244	7	8,892
Davie	15,420	2	7,710
Duplin	41,074	6	6,846
Durham	101,639	11	9,240
Edgecombe	51,634	10	5,163
Forsyth	146,135	10	14,614
Franklin	31,341	4	7,835
Gaston	110,836	8	13,855
Gates	9,555	3	3,185
Graham	6,886	1	6,886
Granville	31,793	3	10,598
Greene	18,024	1	18,024
Guilford	191,057	12	15,921
Halifax	58,377	8	7,297
NORTH CAROLINA—con.			
Harnett	47,605	7	6,801
Haywood	37,631	4	9,408
Henderson	30,921	2	15,461
Hertford	21,453	4	5,363
Hoke	15,756	1	15,756
Hyde	6,479	2	3,240
Iredell	56,303	5	11,261
Jackson	19,261	1	19,261
Johnston	65,906	10	6,591
Jones	11,004	1	11,004
Lee	23,522	4	5,881
Lenoir	45,953	6	7,659
Lincoln	27,459	2	13,730
McDowell	25,720	3	8,573
Macon	16,174	2	8,087
Madison	20,522	4	5,131
Martin	27,938	5	5,588
Mecklenburg	197,052	24	8,211
Mitchell	15,143	2	7,572
Montgomery	17,260	4	4,315
Moore	33,129	6	5,522
Nash	59,919	6	9,987
New Hanover	63,272	6	10,545
Northampton	28,432	5	5,686
Onslow	42,047	4	10,512
Orange	34,435	3	11,478
Pamlico	9,993	1	9,993
Pasquotank	24,347	3	8,116
Pender	18,423	1	18,423
Perquimans	9,602	1	9,602
Person	24,361	1	24,361
Pitt	63,789	10	6,379
Polk	11,627	1	11,627
Randolph	50,804	5	10,161
Richmond	39,597	4	9,899
Robeson	87,769	8	10,971
Rockingham	64,816	11	5,892
Rowan	75,410	8	9,426
Rutherford	46,356	8	5,795
Sampson	49,780	5	9,956
Scotland	26,336	5	5,267
Stanly	37,130	4	9,283
Stokes	21,520	1	21,520
Surry	45,593	6	7,599
Swain	9,921	1	9,921
Transylvania	15,194	1	15,194
Tyrrell	5,048	1	5,048
Union	42,034	5	8,407
Vance	32,101	3	10,700
Wake	136,450	16	8,528
Warren	23,539	2	11,770
Washington	13,180	1	13,180
Watauga	18,342	2	9,171
Wayne	64,267	6	10,711
Wilkes	45,243	3	15,081
Wilson	54,506	7	7,787
Yadkin	22,133	3	7,378
Yancey	16,306	1	16,306
NORTH DAKOTA			
Adams	4,910	1	4,910
Barnes	16,884	5	3,377
Benson	10,675	3	3,558
Billings	1,777	----------	--------
Bottineau	12,140	3	4,047
Bowman	4,001	2	2,001
Burke	6,621	1	6,621
Burleigh	25,673	6	4,279
Cass	58,877	14	4,206
Cavalier	11,840	3	3,947
Dickey	9,121	2	4,561
Divide	5,967	1	5,967
Dunn	7,212	2	3,606
Eddy	5,372	2	2,686

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
NORTH DAKOTA—con.			
Emmons	9,715	2	4,858
Foster	5,337	1	5,337
Golden Valley	3,499	2	1,750
Grand Forks	39,443	6	6,574
Grant	7,114	3	2,371
Griggs	5,460	3	1,820
Hettinger	7,100	3	2,367
Kidder	6,168	2	3,084
La Moure	9,498	5	1,900
Logan	6,357	3	2,119
McHenry	12,556	3	4,185
McIntosh	7,590	4	1,898
McKenzie	6,849	1	6,849
McLean	18,824	5	3,765
Mercer	8,686	2	4,343
Morton	19,295	4	4,824
Mountrail	9,418	2	4,709
Nelson	8,090	6	1,348
Oliver	3,091	1	3,091
Pembina	13,990	6	2,332
Pierce	8,326	2	4,163
Ramsey	14,373	5	2,875
Ransom	8,876	3	2,959
Renville	5,405	1	5,405
Richland	19,865	5	3,973
Rolette	11,102	3	3,701
Sargent	7,616	2	3,808
Sheridan	5,253	2	2,627
Sioux	3,696	---	---
Slope	2,315	---	---
Stark	16,137	5	3,227
Steele	5,145	3	1,715
Stutsman	24,158	5	4,832
Towner	6,360	1	6,360
Traill	11,359	5	2,272
Walsh	18,859	10	1,886
Ward	34,782	5	6,956
Wells	10,417	3	3,472
Williams	16,442	3	5,481
OHIO			
Adams	20,499	5	4,100
Allen	88,183	7	12,598
Ashland	33,040	5	6,608
Ashtabula	78,695	11	7,154
Athens	45,839	7	6,548
Auglaize	30,637	7	4,377
Belmont	87,740	13	6,749
Brown	22,221	9	2,469
Butler	147,203	13	11,323
Carroll	19,039	4	4,760
Champaign	26,793	6	4,466
Clark	111,661	5	22,332
Clermont	42,182	9	4,687
Clinton	25,572	7	3,653
Columbiana	98,920	14	7,066
Coshocton	31,141	3	10,380
Crawford	38,738	9	4,304
Cuyahoga	1,389,532	95	14,627
Darke	41,799	11	3,800
Defiance	25,925	4	6,481
Delaware	30,278	6	5,046
Erie	52,565	8	6,571
Fairfield	52,130	13	4,010
Fayette	22,554	4	5,639
Franklin	503,410	32	15,732
Fulton	25,580	9	2,842
Gallia	24,910	4	6,228
Geauga	26,646	3	8,882
Greene	58,892	8	7,362
Guernsey	38,452	8	4,807
Hamilton	723,952	83	8,722
Hancock	44,280	5	8,856
Hardin	28,673	10	2,867
Harrison	19,054	6	3,176
OHIO—con.			
Henry	22,423	6	3,737
Highland	28,188	6	4,698
Hocking	19,520	2	9,760
Holmes	18,760	4	4,690
Huron	39,353	10	3,935
Jackson	27,767	5	5,553
Jefferson	96,495	14	6,893
Knox	35,287	6	5,881
Lake	75,979	3	25,326
Lawrence	49,115	2	24,558
Licking	70,645	12	5,887
Logan	31,329	9	3,481
Lorain	148,162	14	10,583
Lucas	395,551	22	17,980
Madison	22,300	5	4,460
Mahoning	257,629	14	18,402
Marion	49,959	8	6,245
Medina	40,417	9	4,491
Meigs	23,227	6	3,871
Mercer	28,311	8	3,539
Miami	61,309	7	8,758
Monroe	15,362	2	7,681
Montgomery	398,441	23	17,324
Morgan	12,836	5	2,567
Morrow	17,168	3	5,723
Muskingum	74,535	6	12,423
Noble	11,750	2	5,875
Ottawa	29,469	7	4,210
Paulding	15,047	4	3,762
Perry	28,999	8	3,625
Pickaway	29,352	9	3,261
Pike	14,607	2	7,304
Portage	63,954	7	9,136
Preble	27,081	7	3,869
Putnam	25,248	8	3,156
Richland	91,305	13	7,023
Ross	54,424	8	6,803
Sandusky	46,114	10	4,611
Scioto	82,910	3	27,637
Seneca	52,978	12	4,415
Shelby	28,488	6	4,748
Stark	283,194	21	13,485
Summit	410,032	12	34,169
Trumbull	158,915	10	15,892
Tuscarawas	70,320	14	5,023
Union	20,687	3	6,896
Van Wert	26,971	4	6,743
Vinton	10,759	1	10,759
Warren	38,505	5	7,701
Washington	44,407	10	4,441
Wayne	58,716	15	3,914
Williams	26,202	9	2,911
Wood	59,605	14	4,258
Wyandot	19,785	7	2,826
OKLAHOMA			
Adair	14,918	2	7,459
Alfalfa	10,699	6	1,783
Atoka	14,269	1	14,269
Beaver	7,411	3	2,470
Beckham	21,627	7	3,090
Blaine	15,049	5	3,010
Bryan	28,999	5	5,800
Caddo	34,913	12	2,909
Canadian	25,644	8	3,206
Carter	36,455	4	9,114
Cherokee	18,989	3	6,330
Choctaw	20,405	3	6,802
Cimarron	4,589	2	2,295
Cleveland	41,443	6	6,907
Coal	8,056	1	8,056
Comanche	55,165	8	6,896
Cotton	10,180	2	5,090
Craig	18,263	4	4,566
Creek	43,143	6	7,191

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
OKLAHOMA—con.			
Custer	21,097	7	3,014
Delaware	14,734	2	7,367
Dewey	8,789	5	1,758
Ellis	7,326	3	2,442
Garfield	52,820	9	5,869
Garvin	29,500	10	2,950
Grady	34,872	7	4,982
Grant	10,461	7	1,494
Greer	11,749	4	2,937
Harmon	8,079	2	4,040
Harper	5,977	2	2,989
Haskell	13,313	1	13,313
Hughes	20,664	2	10,332
Jackson	20,082	5	4,016
Jefferson	11,122	6	1,854
Johnston	10,608	1	10,608
Kay	48,892	10	4,889
Kingfisher	12,860	3	4,287
Kiowa	18,926	7	2,704
Latimer	9,690	2	4,845
Le Flore	35,276	7	5,039
Lincoln	22,102	11	2,009
Logan	22,170	8	2,771
Love	7,721	2	3,861
McClain	14,681	4	3,670
McCurtain	31,588	4	7,897
McIntosh	17,829	3	5,943
Major	10,279	4	2,570
Marshall	8,177	2	4,089
Mayes	19,743	3	6,581
Murray	10,775	2	5,388
Muskogee	65,573	7	9,368
Noble	12,156	5	2,431
Nowata	12,734	2	6,367
Okfuskee	16,948	4	4,237
Oklahoma	325,352	18	18,075
Okmulgee	44,561	5	8,912
Osage	33,071	6	5,512
Ottawa	32,218	8	4,027
Pawnee	13,616	4	3,404
Payne	46,430	7	6,633
Pittsburg	41,031	6	6,839
Pontotoc	30,875	4	7,719
Pottawatomie	43,517	6	7,253
Pushmataha	12,001	3	4,000
Roger Mills	7,395	2	3,698
Rogers	19,532	4	4,883
Seminole	40,672	6	6,779
Sequoyah	19,773	2	9,887
Stephens	34,071	6	5,679
Texas	14,235	4	3,559
Tillman	17,598	5	3,520
Tulsa	251,686	16	15,730
Wagoner	16,741	5	3,348
Washington	32,880	3	10,960
Washita	17,657	8	2,207
Woods	14,526	5	2,905
Woodward	14,383	3	4,794
OREGON			
Baker	16,175	3	5,392
Benton	31,570	4	7,893
Clackamas	86,716	7	12,388
Clatsop	30,776	3	10,259
Columbia	22,967	5	4,593
Coos	42,265	6	7,044
Crook	8,991	1	8,991
Curry	6,048	2	3,024
Deschutes	21,812	3	7,271
Douglas	54,549	7	7,793
Gilliam	2,817	2	1,409
Grant	8,329	2	4,165
Harney	6,113	1	6,113
Hood River	12,740	1	12,740
OREGON—con.			
Jackson	58,510	5	11,702
Jefferson	5,536	1	5,536
Josephine	26,542	3	8,847
Klamath	42,150	4	10,538
Lake	6,649	1	6,649
Lane	125,776	9	13,975
Lincoln	21,308	5	4,262
Linn	54,317	9	6,035
Malheur	23,223	4	5,806
Marion	101,401	12	8,450
Morrow	4,783	1	4,783
Multnomah	471,537	29	16,260
Polk	26,317	4	6,579
Sherman	2,271	1	2,271
Tillamook	18,606	3	6,202
Umatilla	41,703	7	5,958
Union	17,962	4	4,491
Wallowa	7,264	1	7,264
Wasco	15,552	3	5,184
Washington	61,269	9	6,808
Wheeler	3,313	1	3,313
Yamhill	33,484	9	3,720
PENNSYLVANIA			
Adams	44,197	14	3,157
Allegheny	1,515,237	107	14,161
Armstrong	80,842	16	5,053
Beaver	175,192	17	10,305
Bedford	40,775	10	4,078
Berks	255,740	29	8,819
Blair	139,514	17	8,207
Bradford	51,722	14	3,694
Bucks	144,620	20	7,231
Butler	97,320	12	8,110
Cambria	209,541	23	9,110
Cameron	7,023	1	7,023
Carbon	57,558	15	3,837
Centre	65,922	12	5,494
Chester	159,141	21	7,578
Clarion	38,344	11	3,486
Clearfield	85,957	10	8,596
Clinton	36,532	7	5,219
Columbia	53,460	13	4,112
Crawford	78,948	10	7,895
Cumberland	94,457	18	5,248
Dauphin	197,784	30	6,593
Delaware	414,234	23	18,010
Elk	34,503	7	4,929
Erie	219,388	20	10,969
Fayette	189,899	12	15,825
Forest	4,944	2	2,472
Franklin	75,927	17	4,466
Fulton	10,387	2	5,194
Greene	45,394	4	11,349
Huntingdon	40,872	10	4,087
Indiana	77,106	12	6,426
Jefferson	49,147	10	4,915
Juniata	15,243	8	1,905
Lackawanna	257,396	26	9,900
Lancaster	234,717	40	5,868
Lawrence	105,120	10	10,512
Lebanon	81,683	16	5,105
Lehigh	198,207	20	9,910
Luzerne	392,241	40	9,806
Lycoming	101,249	16	6,328
McKean	56,607	9	6,290
Mercer	111,954	15	7,464
Mifflin	43,691	7	6,224
Monroe	33,773	4	8,443
Montgomery	353,068	37	9,542
Montour	16,001	3	5,334
Northampton	185,243	21	8,821
Northumberland	117,115	21	5,577
Perry	24,782	10	2,478

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
PENNSYLVANIA—con.			
Philadelphia	2,071,605	105	19,730
Pike	8,425	2	4,213
Potter	16,810	6	2,802
Schuylkill	200,577	34	5,899
Snyder	22,912	6	3,819
Somerset	81,813	17	4,813
Sullivan	6,745	2	3,373
Susquehanna	31,970	6	5,328
Tioga	35,474	9	3,942
Union	23,150	5	4,630
Venango	65,328	9	7,259
Warren	42,698	8	5,337
Washington	209,628	23	9,114
Wayne	28,478	8	3,560
Westmoreland	313,179	32	9,787
Wyoming	16,766	6	2,794
York	202,737	37	5,479
RHODE ISLAND			
Bristol	29,039	2	14,520
Kent	77,651	6	12,942
Newport	53,946	7	7,707
Providence	573,045	53	10,812
Washington	46,250	8	5,781
SOUTH CAROLINA			
Abbeville	22,456	4	5,614
Aiken	53,137	6	8,856
Allendale	11,773	2	5,887
Anderson	90,664	8	11,333
Bamberg	17,533	3	5,845
Barnwell	17,266	3	5,754
Beaufort	26,993	3	8,998
Berkeley	30,251	3	10,084
Calhoun	14,753	2	7,377
Charleston	164,856	12	13,738
Cherokee	34,992	2	17,496
Chester	32,597	3	10,866
Chesterfield	36,236	4	9,059
Clarendon	32,215	2	16,108
Colleton	28,242	2	14,121
Darlington	50,016	5	10,003
Dillon	30,930	4	7,733
Dorchester	22,601	2	11,301
Edgefield	16,591	3	5,530
Fairfield	21,780	3	7,260
Florence	79,710	10	7,971
Georgetown	31,762	3	10,587
Greenville	168,152	10	16,815
Greenwood	41,628	5	8,326
Hampton	18,027	3	6,009
Horry	59,820	4	14,955
Jasper	10,995	1	10,995
Kershaw	32,287	3	10,762
Lancaster	37,071	3	12,357
Laurens	46,974	4	11,744
Lee	23,173	2	11,587
Lexington	44,279	5	8,856
Marion	33,110	5	6,622
Marlboro	31,766	3	10,589
McCormick	9,577	1	9,577
Newberry	31,771	4	7,943
Oconee	39,050	3	13,017
Orangeburg	68,726	10	6,873
Pickens	40,058	5	8,012
Richland	142,565	11	12,960
Saluda	15,924	2	7,962
Spartanburg	150,349	8	18,794
Sumter	57,634	2	28,817
Union	31,334	3	10,445

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
SOUTH CAROLINA—con.			
Williamsburg	43,807	3	14,602
York	71,596	8	8,950
SOUTH DAKOTA			
Armstrong	52	-------	-------
Aurora	5,020	3	1,673
Beadle	21,082	4	5,271
Bennett	3,396	1	3,396
Bon Homme	9,440	5	1,888
Brookings	17,851	7	2,550
Brown	32,617	8	4,077
Brule	6,076	3	2,025
Buffalo	1,615	-------	-------
Butte	8,161	3	2,720
Campbell	4,046	1	4,046
Charles Mix	15,558	4	3,890
Clark	8,369	6	1,395
Clay	10,993	4	2,748
Codington	18,944	4	4,736
Corson	6,168	2	3,084
Custer	5,517	2	2,759
Davison	16,522	2	8,261
Day	12,294	5	2,459
Deuel	7,689	3	2,563
Dewey	4,916	1	4,916
Douglas	5,636	3	1,879
Edmunds	7,275	4	1,819
Fall River	10,439	2	5,220
Faulk	4,752	2	2,376
Grant	10,233	5	2,047
Gregory	8,556	3	2,852
Haakon	3,167	2	1,584
Hamlin	7,058	6	1,176
Hand	7,149	2	3,575
Hanson	4,896	3	1,632
Harding	2,289	1	2,289
Hughes	8,111	3	2,704
Hutchinson	11,423	6	1,904
Hyde	2,811	1	2,811
Jackson	1,768	2	884
Jerauld	4,476	2	2,238
Jones	2,281	3	760
Kingsbury	9,962	5	1,992
Lake	11,792	5	2,358
Lawrence	16,648	4	4,162
Lincoln	12,767	5	2,553
Lyman	4,572	2	2,286
McCook	8,828	2	4,414
McPherson	7,071	2	3,536
Marshall	7,835	4	1,959
Meade	11,516	3	3,839
Mellette	3,046	1	3,046
Miner	6,268	3	2,089
Minnehaha	70,910	14	5,065
Moody	9,252	2	4,626
Pennington	34,053	7	4,865
Perkins	6,776	3	2,259
Potter	4,688	2	2,344
Roberts	14,929	5	2,986
Sanborn	5,142	2	2,571
Shannon	5,669	-------	-------
Spink	12,204	7	1,743
Stanley	2,055	1	2,055
Sully	2,713	1	2,713
Todd	4,758	-------	-------
Tripp	9,139	2	4,570
Turner	12,100	6	2,017
Union	10,792	4	2,698
Walworth	7,648	3	2,549
Washabaugh	1,551	-------	-------
Yankton	16,804	4	4,201
Ziebach	2,606	1	2,606

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
TENNESSEE			
Anderson	59,407	5	11,881
Bedford	23,627	2	11,814
Benton	11,495	2	5,748
Bledsoe	8,561	1	8,561
Blount	54,691	2	27,346
Bradley	32,338	4	8.085
Campbell	34,369	5	6,874
Cannon	9,174	3	3,058
Carroll	26,553	7	3,793
Carter	42,432	3	14,144
Cheatham	9,167	3	3,056
Chester	11,149	3	3,716
Claiborne	24,788	2	12,394
Clay	8,701	1	8,701
Cocke	22,991	1	22,991
Coffee	23,049	4	5,762
Crockett	16,624	8	2,078
Cumberland	18,877	1	18,877
Davidson	321,758	30	10,725
Decatur	9,442	2	4,721
De Kalb	11,680	4	2,920
Dickson	18,805	5	3,761
Dyer	33,473	4	8,368
Fayette	27,535	4	6,884
Fentree	14,917	1	14,917
Franklin	25,431	5	5,086
Gibson	48,132	14	3,438
Giles	26,961	5	5,392
Grainger	13,086	1	13,086
Greene	41,048	3	13,683
Grundy	12,558	2	6,279
Hamblen	23,976	2	11,988
Hamilton	208,255	14	14,875
Hancock	9,116	1	9,116
Hardeman	23,311	7	3,330
Hardin	16,908	2	8,454
Hawkins	30,494	3	10,165
Haywood	26,212	3	8,737
Henderson	17,173	4	4,293
Henry	23,828	5	4,766
Hickman	13,353	2	6,677
Houston	5,318	1	5,318
Humphreys	11,030	2	5,515
Jackson	12,348	3	4,116
Jefferson	19,667	3	6,556
Johnson	12,278	1	12,278
Knox	223,007	14	15,929
Lake	11,655	2	5,828
Lauderdale	25,047	5	5,009
Lawrence	28,818	4	7,205
Lewis	6,078	2	3,039
Lincoln	25,624	4	6,406
Loudon	23,182	3	7,727
McMinn	32,024	6	5,337
McNairy	20,390	4	5,098
Macon	13,599	2	6,800
Madison	60,128	3	20,043
Marion	20,520	2	10,260
Marshall	17,768	5	3,554
Maury	40,368	7	5,767
Meigs	6,080	1	6,080
Monroe	24,513	3	8,171
Montgomery	44,186	4	11,047
Moore	3,948	1	3.948
Morgan	15,727	2	7,864
Obion	29,056	9	3,228
Overton	17,566	1	17,566
Perry	6,462	2	3,231
Pickett	5,093	1	5,093
Polk	14,074	3	4,691
Putnam	29,869	3	9,956
Rhea	16,041	2	8,021
Roane	31,665	3	10,555
Robertson	27,024	5	5,405
Rutherford	40,696	7	5,814
Scott	17,362	3	5,787
TENNESSEE—con.			
Sequatchie	5,685	1	5,685
Sevier	23,375	2	11,688
Shelby	482,393	29	16,634
Smith	14,098	2	7,049
Stewart	9,175	4	2,294
Sullivan	95,063	4	23,766
Sumner	33,533	7	4,790
Tipton	29,782	6	4,964
Trousdale	5,520	2	2,760
Unicoi	15,886	1	15,886
Union	8,670	1	8,670
Van Buren	3,985	1	3,985
Warren	22,271	4	5,568
Washington	59,971	6	9,995
Wayne	13,864	4	3,466
Weakley	27,962	8	3,495
White	16,204	2	8,102
Williamson	24,307	3	8,102
Wilson	26,318	5	5,264
TEXAS			
Anderson	31,875	5	6,375
Andrews	5,002	1	5.002
Angelina	36,032	2	18,016
Aransas	4,252	1	4,252
Archer	6,816	1	6,816
Armstrong	2,215	1	2,215
Atascosa	20,048	5	4,010
Austin	14,663	6	2,444
Bailey	7,592	1	7,592
Bandera	4,410	2	2,205
Bastrop	19,622	4	4,906
Baylor	6,875	2	3,438
Bee	18,174	3	6,058
Bell	73,824	10	7,382
Bexar	500,460	19	26,340
Blanco	3,780	2	1,890
Borden	1,106	----------	----------
Bosque	11,836	5	2,367
Bowie	61,966	5	12,393
Brazoria	46,549	9	5,172
Brazos	38,390	4	9,598
Brewster	7,309	1	7,309
Briscoe	3,528	2	1,764
Brooks	9,195	1	9,195
Brown	28,607	4	7,152
Burleson	13,000	4	3,250
Burnet	10,356	3	3,452
Caldwell	19,350	3	6,450
Calhoun	9,222	1	9,222
Callahan	9,087	2	4,544
Cameron	125,170	7	17,881
Camp	8,740	2	4,370
Carson	6,852	3	2,284
Cass	26,732	6	4,455
Castro	5,417	1	5,417
Chambers	7,871	1	7,871
Cherokee	38,694	6	6,449
Childress	12,123	2	6,062
Clay	9,896	2	4,948
Cochran	5,928	1	5,928
Coke	4,045	2	2,023
Coleman	15,503	3	5,168
Collin	41,692	10	4,169
Collingsworth	9,139	4	2,285
Colorado	17,576	5	3,515
Comal	16,357	2	8,179
Comanche	15,516	4	3,879
Concho	5,078	2	2,539
Cooke	22,146	4	5,537
Coryell	16,284	4	4,071
Cottle	6,099	1	6,099
Crane	3,965	1	3,965
Crockett	3,981	1	3,985
Crosby	9,582	3	3,190

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office		Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
TEXAS—con.				TEXAS—con.			
Culberson	1,825	1	1,824	Kenedy	632	-------	-------
Dallam	7,640	2	3,821	Kent	2,249	-------	-------
Dallas	614,799	32	19,212	Kerr	14,022	2	7,011
Dawson	19,113	2	9,557	Kimble	4,619	2	2,310
Deaf Smith	9,111	2	4,556	King	870	-------	-------
Delta	8,964	3	2,988	Kinney	2,668	1	2,668
Denton	41,365	8	5,171	Kleberg	21,991	2	10,996
De Witt	22,973	8	2,872	Knox	10,082	2	5,041
Dickens	7,177	1	7,177	Lamar	43,033	5	8,607
Dimmit	10,654	2	5,327	Lamb	20,015	5	4,003
Donley	6,216	4	1,554	Lampasas	9,929	3	3,310
Duval	15,643	2	7,822	La Salle	7,485	1	7,485
Eastland	23,942	5	4,788	Lavaca	22,159	4	5,540
Ector	42,102	2	21,051	Lee	10,144	4	2,536
Edwards	2,908	1	2,908	Leon	12,024	5	2,405
Ellis	45,645	11	4,150	Liberty	26,729	6	4,455
El Paso	194,968	9	21,663	Limestone	25,251	6	4,209
Erath	18,434	3	6,145	Lipscomb	3,658	4	915
Falls	26,724	8	3,341	Live Oak	9,054	2	4,527
Fannin	31,253	8	3,907	Llano	5,377	1	5,377
Fayette	24,176	8	3,022	Loving	227	-------	-------
Fisher	11,023	2	5,512	Lubbock	101,048	6	16,841
Floyd	10,535	2	5,268	Lynn	11,030	3	3,677
Foard	4,216	1	4,216	McCulloch	11,701	3	3,900
Fort Bend	31,056	6	5,176	McLennan	130,194	11	11,836
Franklin	6,257	1	6,257	McMullen	1,187	-------	-------
Freestone	15,696	5	3,139	Madison	7,996	2	3,998
Frio	10,357	2	5,179	Marion	10,172	1	10,172
Gaines	8,909	2	4,455	Martin	5,541	1	5,541
Galveston	113,066	9	12,563	Mason	4,945	2	2,473
Garza	6,281	1	6,281	Matagorda	21,559	3	7,186
Gillespie	10,520	3	3,507	Maverick	12,292	1	12,292
Glasscock	1,089	-------	-------	Medina	17,013	4	4,253
Goliad	6,219	1	6,219	Menard	4,175	2	2,088
Gonzales	21,164	3	7,055	Midland	25,785	2	12,893
Gray	24,728	3	8,243	Milam	23,585	5	4,717
Grayson	70,467	10	7,047	Mills	5,999	2	3,000
Gregg	61,258	6	10,210	Mitchell	14,357	2	7,179
Grimes	15,135	6	2,523	Montague	17,070	4	4,268
Guadalupe	25,392	6	4,232	Montgomery	24,504	2	12,252
Hale	28,211	5	5,642	Moore	13,349	1	13,349
Hall	10,930	4	2,733	Morris	9,433	3	3,144
Hamilton	10,660	3	3,553	Motley	3,963	1	3,963
Hansford	4,202	2	2,101	Nacogdoches	30,326	6	5,054
Hardeman	10,212	4	2,553	Navarro	39,916	9	4,435
Hardin	19,535	2	9,768	Newton	10,832	1	10,832
Harris	806,701	36	22,408	Nolan	19,808	3	6,603
Harrison	47,745	4	11,936	Nueces	165,471	9	18,386
Hartley	1,913	-------	-------	Ochiltree	6,024	2	3,012
Haskell	13,736	3	4,579	Oldham	1,672	1	1,672
Hays	17,840	3	5,947	Orange	40,567	2	20,284
Hemphill	4,123	1	4,123	Palo Pinto	17,154	7	2,451
Henderson	23,405	5	4,681	Panola	19,250	2	9,625
Hidalgo	160,446	14	11,460	Parker	21,528	3	7,176
Hill	31,282	10	3,128	Parmer	5,787	2	2,894
Hockley	20,407	3	6,802	Pecos	9,939	1	9,939
Hood	5,287	2	2,644	Polk	16,194	3	5,398
Hopkins	23,490	2	11,745	Potter	73,366	3	24,455
Houston	22,825	6	3,804	Presidio	7,354	2	3,677
Howard	26,722	2	13,361	Rains	4,266	2	2,133
Hudspeth	4,298	-------	-------	Randall	13,774	1	13,774
Hunt	42,731	7	6,104	Reagan	3,127	1	3,127
Hutchinson	31,580	2	15,790	Real	2,479	-------	-------
Irion	1,590	1	1,590	Red River	21,851	3	7,284
Jack	7,755	3	2,585	Reeves	11,745	2	5,873
Jackson	12,916	3	4,305	Refugio	10,113	2	5,057
Jasper	20,049	2	10,025	Roberts	1,031	1	1,031
Jeff Davis	2,090	1	2,090	Robertson	19,908	4	4,977
Jefferson	195,083	7	27,869	Rockwall	6,156	2	3,078
Jim Hogg	5,389	1	5,389	Runnels	16,771	6	2,795
Jim Wells	27,991	5	5,598	Rusk	42,348	4	10,587
Johnson	31,390	6	5,232	Sabine	8,568	1	8,568
Jones	22,147	4	5,537	San Augustine	8,837	2	4,419
Karnes	17,139	4	4,285	San Jacinto	7,172	1	7,172
Kaufman	31,170	8	3,896	San Patricio	35,842	7	5,120
Kendall	5,423	2	2,712	San Saba	8,666	3	2,889

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
TEXAS—con.			
Schleicher	2,852	1	2,852
Scurry	22,779	2	11,390
Shackelford	5,001	2	2,501
Shelby	23,479	5	4,696
Sherman	2,443	1	2,443
Smith	74,701	7	10,672
Somervell	2,542	1	2,542
Starr	13,948	1	13,948
Stephens	10,597	1	10,597
Sterling	1,282	1	1,282
Stonewall	3,679	1	3,679
Sutton	3,746	1	3,746
Swisher	8,249	2	4,125
Tarrant	361,253	15	24,084
Taylor	63,370	6	10,562
Terrell	3,189	1	3,189
Terry	13,107	2	6,554
Throckmorton	3,618	2	1,809
Titus	17,302	3	5,767
Tom Green	58,929	3	19,643
Travis	160,980	7	22,997
Trinity	10,040	2	5,020
Tyler	11,292	3	3,764
Upshur	20,822	4	5,206
Upton	5,307	2	2,654
Uvalde	16,015	2	8,008
Val Verde	16,635	2	8,318
Van Zandt	22,593	6	3,766
Victoria	31,241	2	15,621
Walker	20,163	3	6,721
Waller	11,961	3	3,987
Ward	13,346	2	6,673
Washington	20,542	5	4,108
Webb	56,141	2	28,071
Wharton	36,077	5	7,215
Wheeler	10,317	4	2,579
Wichita	98,493	7	14,070
Wilbarger	20,552	3	6,851
Willacy	20,920	2	10,460
Williamson	38,853	13	2,989
Wilson	14,672	4	3,668
Winkler	10,064	2	5,032
Wise	16,141	6	2,690
Wood	21,308	5	4,262
Yoakum	4,339	1	4,339
Young	16,810	4	4,203
Zapata	4,405	1	4,405
Zavala	11,201	2	5,601
UTAH			
Beaver	4,856	2	2,428
Box Elder	19,734	2	9,867
Cache	33,536	6	5,589
Carbon	24,901	3	8,300
Daggett	364	----------	----------
Davis	30,867	7	4,410
Duchesne	8,134	1	8,134
Emery	6,304	----------	----------
Garfield	4,151	----------	----------
Grand	1,903	1	1,903
Iron	9,642	2	4,821
Juab	5,981	1	5,981
Kane	2,299	----------	----------
Millard	9,387	2	4,694
Morgan	2,519	1	2,519
Piute	1,911	----------	----------
Rich	1,673	----------	----------
Salt Lake	274,895	19	14,468
San Juan	5,315	----------	----------
Sanpete	13,891	4	3,473
Sevier	12,072	3	4,024
Summit	6,745	3	2,248
Tooele	14,636	1	14,636
Uintah	10,300	2	5,150
Utah	81,912	11	7,447
UTAH—con.			
Wasatch	5,574	1	5,574
Washington	9,836	2	4,918
Wayne	2,205	1	2,205
Weber	83,319	4	20,830
VERMONT			
Addison	19,442	5	3,888
Bennington	24,115	4	6,029
Caledonia	24,049	6	4,008
Chittenden	62,570	8	7,821
Essex	6,257	1	6,257
Franklin	29,894	7	4,271
Grand Isle	3,406	1	3,406
Lamoille	11,388	7	1,627
Orange	17,027	4	4,257
Orleans	21,190	6	3,532
Rutland	45,905	9	5,101
Washington	42,870	10	4,287
Windham	28,749	4	7,187
Windsor	40,885	9	4,543
VIRGINIA			
Accomac	33,832	10	3,383
Albemarle	26,662	2	13,331
Alleghany	23,139	2	11,570
Amelia	7,908	1	7,908
Amherst	20,332	1	20,332
Appomattox	8,764	2	4,382
Arlington	135,449	10	13,545
Augusta	34,154	5	6,831
Bath	6,296	1	6,296
Bedford	29,627	3	9,876
Bland	6,436	1	6,436
Botetourt	15,766	5	3,153
Brunswick	20,136	2	10,068
Buchanan	35,748	1	35,748
Buckingham	12,288	1	12,288
Campbell	28,877	3	9,626
Caroline	12,471	1	12,471
Carroll	26,695	1	26,695
Charles City County	4,676	----------	----------
Charlotte	14,057	3	4,686
Chesterfield	40,400	1	40,400
Clarke	7,074	3	2,358
Craig	3,452	2	1,726
Culpeper	13,242	2	6,621
Cumberland	7,252	----------	----------
Dickenson	23,393	2	11,697
Dinwiddie	18,839	3	6,280
Elizabeth City County	55,028	3	18,343
Essex	6,530	2	3,265
Fairfax	98,557	5	19,711
Fauquier	21,248	5	4,250
Floyd	11,351	2	5,676
Fluvanna	7,121	2	3,561
Franklin	24,560	4	6,140
Frederick	17,537	2	8,769
Giles	18,956	4	4,739
Gloucester	10,343	1	10,343
Goochland	8,934	1	8,934
Grayson	21,379	5	4,276
Greene	4,745	1	4,745
Greensville	16,319	2	8,160
Halifax	41,442	3	13,814
Hanover	21,985	6	3,664
Henrico	57,340	----------	----------
Henry	31,219	2	15,610
Highland	4,069	2	2,035
Isle of Wight	14,906	3	4,969
James City County	6,317	----------	----------
King and Queen	6,299	----------	----------
King George	6,710	1	6,710
King William	7,589	2	3,795

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
VIRGINIA—con.			
Lancaster	8,640	4	2,160
Lee	36,106	4	9,027
Loudoun	21,147	6	3,525
Louisa	12,826	3	4,275
Lunenburg	14,116	2	7,058
Madison	8,273	1	8,273
Mathews	7,148	1	7,148
Mecklenburg	33,497	6	5,583
Middlesex	6,715	2	3,358
Montgomery	29,780	6	4,963
Nansemond	25,238	2	12,619
Nelson	14,042	1	14,042
New Kent	3,995	---	---
Norfolk	99,937	---	---
Northampton	17,300	4	4,325
Northumberland	10,012	3	3,337
Nottoway	15,479	6	2,580
Orange	12,755	3	4,252
Page	15,152	4	3,788
Patrick	15,642	2	7,821
Pittsylvania	66,096	4	16,524
Powhatan	5,556	1	5,556
Prince Edward	15,398	3	5,133
Prince George	19,679	2	9,840
Princess Anne	42,277	3	14,092
Prince William	22,612	5	4,522
Pulaski	27,758	3	9,253
Rappahannock	6,112	2	3,056
Richmond	6,189	1	6,189
Roanoke	41,486	3	13,829
Rockbridge	23,359	8	2,920
Rockingham	35,079	5	7,016
Russell	26,818	3	8,939
Scott	27,640	1	27,640
Shenandoah	21,169	7	3,024
Smyth	30,187	4	7,547
Southampton	26,522	6	4,420
Spotsylvania	11,920	---	---
Stafford	11,902	1	11,902
Surry	6,220	1	6,220
Sussex	12,785	4	3,196
Tazewell	47,512	6	7,919
Warren	14,801	2	7,401
Warwick	39,875	2	19,938
Washington	37,536	6	6,256
Westmoreland	10,148	4	2,537
Wise	56,336	7	8,048
Wythe	23,327	5	4,665
York	11,750	3	3,917
Alexandria City	61,787	6	10,298
Bristol City	15,954	2	7,977
Buena Vista City	5,214	2	2,607
Charlottesville City	25,969	5	5,194
Clifton Forge City	5,795	2	2,898
Colonial Heights City	6,077	1	6,077
Danville City	35,066	8	4,383
Falls Church City	7,535	1	7,535
Fredericksburg City	12,158	3	4,053
Hampton City	5,966	3	1,989
Harrisonburg City	10,810	3	3,603
Hopewell City	10,219	1	10,219
Lynchburg City	47,727	9	5,303
Martinsville City	17,251	3	5,750
Newport News City	42,358	5	8,472
Norfolk City	213,513	26	8,212
Petersburg City	35,054	3	11,685
Portsmouth City	80,039	6	13,340
Radford City	9,026	2	4,513
Richmond City	230,310	25	9,212
Roanoke City	91,921	7	13,132
South Norfolk City	10,434	1	10,434
Staunton City	19,927	5	3,985
Suffolk City	12,339	3	4,113
Waynesboro City	12,357	3	4,119
Williamsburg City	6,735	1	6,735
Winchester City	13,841	3	4,614

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
WASHINGTON			
Adams	6,584	3	2,195
Asotin	10,878	1	10,878
Benton	51,370	5	10,274
Chelan	39,301	5	7,860
Clallam	26,396	4	6,599
Clark	85,307	8	10,663
Columbia	4,860	2	2,430
Cowlitz	53,369	6	8,895
Douglas	10,817	1	10,817
Ferry	4,096	1	4,096
Franklin	13,563	2	6,782
Garfield	3,204	1	3,204
Grant	24,346	6	4,058
Grays Harbor	53,644	6	8,941
Island	11,079	2	5,540
Jefferson	11,618	1	11,618
King	732,992	57	12,860
Kitsap	75,724	8	9,466
Kittitas	22,235	5	4,447
Klickitat	12,049	2	6,025
Lewis	43,755	7	6,251
Lincoln	10,970	7	1,567
Mason	15,022	1	15,022
Okanogan	29,131	8	3,641
Pacific	16,558	3	5,519
Pend Oreille	7,413	2	3,707
Pierce	275,876	17	16,228
San Juan	3,245	1	3,245
Skagit	43,273	8	5,409
Skamania	4,788	1	4,788
Snohomish	111,580	15	7,439
Spokane	221,561	19	11,661
Stevens	18,580	3	6,193
Thurston	44,884	3	14,961
Wahkiakum	3,835	1	3,835
Walla Walla	40,135	4	10,034
Whatcom	66,733	9	7,415
Whitman	32,469	15	2,165
Yakima	135,723	12	11,310
WEST VIRGINIA			
Barbour	19,745	2	9,873
Berkeley	30,359	4	7,590
Boone	33,173	3	11,058
Braxton	18,082	2	9,041
Brooke	26,904	4	6,726
Cabell	108,035	6	18,006
Calhoun	10,259	1	10,259
Clay	14,961	2	7,481
Doddridge	9,026	2	4,513
Fayette	82,443	8	10,305
Gilmer	9,746	2	4,873
Grant	8,756	2	4,378
Greenbrier	39,295	6	6,549
Hampshire	12,577	2	6,289
Hancock	34,388	2	17,194
Hardy	10,032	2	5,016
Harrison	85,296	8	10,662
Jackson	15,299	3	5,100
Jefferson	17,184	4	4,296
Kanawha	239,629	9	26,625
Lewis	21,074	2	10,537
Lincoln	22,466	1	22,466
Logan	77,391	1	77,391
McDowell	98,887	6	16,481
Marion	71,521	5	14,304
Marshall	36,893	5	7,379
Mason	23,537	2	11,769
Mercer	75,013	6	12,502
Mineral	22,333	3	7,444
Mingo	47,409	3	15,803
Monongalia	60,797	2	30,399
Monroe	13,123	4	3,281
Morgan	8,276	1	8,276
Nicholas	27,696	3	9,232
Ohio	71,672	8	8,959
Pendleton	9,313	1	9,313

See footnote at end of table.

TABLE XXXI.—*Population and number of commercial banking offices, by county, 1950*—Continued

	Population of county [1]	Number of banking offices Dec. 31, 1950	Population per banking office
WEST VIRGINIA—con.			
Pleasants	6,369	2	3,185
Pocahontas	12,480	2	6,240
Preston	31,399	5	6,280
Putnam	21,021	2	10,511
Raleigh	96,273	3	32,091
Randolph	30,558	6	5,093
Ritchie	12,535	3	4,178
Roane	18,408	3	6,136
Summers	19,183	2	9,592
Taylor	18,422	1	18,422
Tucker	10,600	4	2,650
Tyler	10,535	3	3,512
Upshur	19,242	2	9,621
Wayne	38,696	3	12,899
Webster	17,888	1	17,888
Wetzel	20,154	3	6,718
Wirt	5,119	1	5,119
Wood	66,540	5	13,308
Wyoming	37,540	2	18,770
WISCONSIN			
Adams	7,897	2	3,949
Ashland	19,387	5	3,877
Barron	34,683	11	3,153
Bayfield	13,718	6	2,286
Brown	97,922	15	6,528
Buffalo	14,698	8	1,837
Burnett	10,199	3	3,400
Calumet	18,797	9	2,089
Chippewa	42,753	8	5,344
Clark	32,380	14	2,313
Columbia	33,939	14	2,424
Crawford	17,661	8	2,208
Dane	168,630	31	5,440
Dodge	57,504	21	2,738
Door	20,690	4	5,173
Douglas	46,453	6	7,742
Dunn	27,245	7	3,892
Eau Claire	53,978	4	13,495
Florence	3,737	1	3,737
Fond du Lac	67,666	14	4,833
Forest	9,408	3	3,136
Grant	41,544	21	1,978
Green	24,125	9	2,681
Green Lake	14,738	8	1,842
Iowa	19,555	9	2,173
Iron	8,677	1	8,677
Jackson	16,033	6	2,672
Jefferson	43,124	17	2,537
Juneau	18,911	8	2,364
Kenosha	75,157	5	15,031
Kewaunee	17,347	6	2,891
La Crosse	67,597	9	7,511
Lafayette	18,115	10	1,812
Langlade	21,959	3	7,320
Lincoln	22,176	4	5,544
Manitowoc	66,607	18	3,700
Marathon	80,332	15	5,355
Marinette	35,716	12	2,976
Marquette	8,811	5	1,762
WISCONSIN—con.			
Milwaukee	863,937	43	20,092
Monroe	31,375	11	2,852
Oconto	26,212	6	4,369
Oneida	20,505	5	4,101
Outagamie	81,564	16	5,098
Ozaukee	23,302	7	3,329
Pepin	7,430	2	3,715
Pierce	21,409	10	2,141
Polk	24,880	12	2,073
Portage	34,845	8	4,356
Price	16,338	6	2,723
Racine	109,105	13	8,393
Richland	19,236	5	3,847
Rock	92,644	14	6,617
Rusk	16,764	6	2,794
St. Croix	25,890	10	2,589
Sauk	38,088	14	2,721
Sawyer	10,275	4	2,569
Shawano	35,198	15	2,347
Sheboygan	80,415	19	4,232
Taylor	18,441	4	4,610
Trempealeau	23,623	11	2,148
Vernon	27,879	11	2,534
Vilas	9,255	2	4,628
Walworth	41,413	12	3,451
Washburn	11,647	4	2,912
Washington	33,881	11	3,080
Waukesha	85,683	21	4,080
Waupaca	34,986	12	2,916
Waushara	13,862	7	1,980
Winnebago	90,841	12	7,570
Wood	50,524	11	4,593
WYOMING			
Albany	19,055	1	19,055
Bighorn	13,176	3	4,392
Campbell	4,839	1	4,839
Carbon	15,742	4	3,936
Converse	5,933	1	5,933
Crook	4,738	1	4,738
Fremont	19,580	4	4,895
Goshen	12,634	2	6,317
Hot Springs	5,250	1	5,250
Johnson	4,707	2	2,354
Laramie	47,662	4	11,916
Lincoln	9,023	2	4,512
Natrona	31,437	2	15,719
Niobrara	4,701	1	4,701
Park	15,182	4	3,796
Platte	7,925	3	2,642
Sheridan	20,185	3	6,728
Sublette	2,481	1	2,481
Sweetwater	22,017	5	4,403
Teton	2,593	1	2,593
Uinta	7,331	3	2,444
Washakie	7,252	2	3,626
Weston	6,733	2	3,367
Yellowstone National Park	353		

[1] Data from the 1950 Census of Population. In some cases figures are preliminary; latest figures available as of the date of preparation of this exhibit were used. For the country as a whole, the difference between preliminary and final figures was less than 1/10 of 1 percent.

I. AVAILABILITY OF BORROWING FACILITIES FOR SMALL BUSINESS

58. Discuss the changes which have occurred during the last 25 years in the ease or difficulty with which small commercial and industrial businessmen have been able to raise capital or to borrow. What in your opinion are the reasons for such changes as you find to have occurred? Do you believe that a more liberal supply of capital and credit to small business would contribute to the diffusion of economic power and to the dynamic character of the economy? What steps could be taken to bring about a more liberal supply of capital and credit to small business? Do you believe that any of these steps would be desirable? Distinguish between the longer-term aspects of the problem and those of particular importance today during the current national defense emergency.

The reply to this question is presented in three parts: (*a*) developments in the financing of small commercial and industrial business enterprises, (*b*) economic consequences of increased financial aid to small business, and (*c*) methods of facilitating small business financing. Since the concept of *small commercial and industrial business* is variable, depending in part on the particular industry in which a concern is engaged and in part on the nature of an individual concern's market, geographical location, and access to labor, material and financial resources, no single size criterion or set of criteria will be employed to distinguish *very small* from *small*, or *small* from *medium-sized* business concerns. It is generally recognized, however, that a small manufacturing concern, whether defined in terms of net sales, total assets, net worth, or number of employees, would appear to be substantially larger than a small trade or service concern. Consequently the terms *very small*, *small*, and *smaller* as used in these answers have relative rather than absolute connotations.

(*a*) *Financing developments affecting small commercial and industrial business enterprises*

Changes during the past 25 years in the relative ease or difficulty with which small businessmen have been able to finance their requirements from external sources have varied with the types of funds sought. In the case of short-term or commercial credit and of intermediate-term borrowed capital, changes have been in the direction of making such financing more readily available; in the case of equity capital, changes in the tax structure and in the savings and investment preferences of individuals have tended to curtail both availability of such funds and the desire of small business to obtain them. While many of the changes tending to facilitate small business borrowing, both short- and intermediate-term, have been initiated by the suppliers of credit, some have originated with small business concerns, particularly as regards improvements in their accounting, inventory control, collection of receivables, and general operating policies which have enhanced both their creditworthiness and the ability of commercial banks and other lenders to appraise such creditworthiness.

Short-term financing.—As discussed in the answer to Question H-54, there was a noticeable relative decline in over-all business use of short-term commercial bank credit during the period 1920–39. This decline reflected a number of factors, including changes in the industrial and size composition of the business population, the sharp contraction of business activity and wide-scale debt liquidation of the early thirties, the slow recovery in business activity following the depression, and the introduction of new commercial bank lending practices and new sources of funds that tended to make business concerns less dependent on short-term bank loans.

The introduction or further development during the thirties in such commercial bank lending practices as term loans, accounts receivable financing, installment equipment repayment loans, field-warehouse financing and consumer installment financing were particularly significant from the standpoint of small business concerns. Term loans, by making credit available for periods of 1 to 5 years or longer, have enabled many small and medium-sized businesses to finance the purchase of facilities, equipment, and machinery with funds whose repayment was somewhat more closely related to the life of the asset acquired—financing which formerly had been obtained largely on the basis of renewable short-term loans that were subject to call or failure of renewal in periods of credit stringency.

Development of accounts receivable credits, installment repayment equipment loans, and field-warehouse financing, by broadening the category of acceptable loan collateral, has enabled many small businesses to obtain credit on the basis of assets which formerly were considered unacceptable as collateral, or which had been offered as collateral only as a last resort in times of acute financial distress. The further spread of such consumer financing methods as installment and personal loans provided some very small business concerns, the majority of which are unincorporated, with supplementary direct and indirect sources of short- and intermediate-term credit.

A decline in short-term interest rates during the early twenties and again during the thirties presumably facilitated the financing of short-term credit requirements of smaller businesses by reducing the cost of such funds. In addition, a gradual diffusion of business funds throughout the country during this period, indicated by some narrowing of regional interest rate differentials, helped to alleviate credit shortages in certain geographic areas.

In addition to changes in commercial bank lending practices and the growth of such alternative private sources of short-term business credit as commercial and sales finance companies, factors, life insurance companies (through the instrument of the policy loan), and specialized consumer lending companies, direct lending by the Federal Government through the Reconstruction Finance Corporation and supplementary financial aid in the form of industrial loan guarantees and direct loans by the Federal Reserve Banks were introduced. Effectiveness of lending operations by the Federal Reserve Banks under Section 13b of the Federal Reserve Act was limited by certain restrictions prescribed by the law, principally the requirements that loans must be for working capital purposes, that they may be made only to established businesses, and that their maturities may not exceed 5 years.[7] In addition, direct loans to borrowers by the Reserve Banks can be made only in exceptional circumstances when the requisite financial assistance cannot be obtained on a reasonable basis from the usual sources. The Reconstruction Finance Corporation, whose lending activities were less narrowly prescribed than those of the Federal Reserve Banks, engaged more actively in lending and guaranteeing loans to small business.

The experience gained in administering these programs was to serve the country and businesses in good stead during World War II, and again since the start of the Korean conflict when commercial banks played a major role in providing Government guaranteed working capital credit to smaller businesses engaged in fulfilling war or defense contracts and subcontracts. Of a total of 4,864 concerns obtaining Government guaranteed Regulation V loans during World War II, 3,054, or 63 percent, had total assets of less than $500,000, and accounted for 9 percent of the dollar volume of loans authorized.

Transition of the economy to a peacetime basis following World War II was accompanied by a marked expansion in commercial bank loans to business. In order to determine the borrower composition of this loan expansion, the Federal Reserve System in the fall of 1946 conducted a Nation-wide survey which encompassed nearly 2,000 member banks. This survey revealed that smaller business concerns accounted for the greater part of the number, and for a substantial proportion of the total dollar volume, of member banks loans to business. For example, if small manufacturing concerns are defined as those with total assets of less than $750,000; small wholesale trade, less than $250,000; small retail trade, service, construction and other concerns, less than $50,000, it appears from this survey that small businesses accounted for 77 percent of the number and 22 percent of the dollar volume of member bank loans to business. Moreover, this survey showed that banks of all sizes were actively engaged in lending to small business concerns, and that customer charges on small loans, while higher than rates charged large concerns for substantial amounts of credit, were not disproportionate to the relatively greater expense involved and greater risk generally assumed in lending to small business concerns.

Commercial and industrial loans of commercial banks continued to expand through 1948 and, following some contraction during 1949, increased very sharply after the outbreak of the Korean war, reaching a record level of about $26 billion in December 1951. Current data comparable with those obtained from the Federal Reserve's 1946 loan survey are not available. However, there are many reasons for believing that loans to smaller commercial and industrial businesses, which amounted to $2.9 billion out of a member bank loan total of 13.2

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[7] Since the enactment of the section in 1934 the Reserve Banks have approved 3,734 applications for loans and commitments under Section 13b, totaling approximately $700 million. A substantial part of this total represents loans made directly by the Federal Reserve Banks.

A special study made several years ago for the period from June 19, 1934, to May 31, 1940, showed that out of 2,911 applications approved in the amount of $192 million, 1,299 amounting to nearly $54 million were direct loans. The proportion of direct loans has not changed materially since 1940. Approximately 70 percent of all direct loans made during the period of the study referred to above were to borrowers with total assets under $250,000, and nearly half of these were to borrowers with total assets under $50,000. The average amount per loan of all direct loans was $44,300, while the average to the smallest borrowers, that is, those with assets under $50,000, was $3,800. Loans as low as $300 have been approved.

billion in November 1946, still account for over a fifth of the current commercial bank business loan total.

In addition to commercial banks, other privately owned financing institutions have been actively engaged, throughout the postwar period, in supplying short-term credit to businesses. A recent Department of Commerce survey revealed that of the loans obtained during the period July 1, 1949, to June 30, 1950, by a group of small business concerns, one-third of the number and one-fifth of the amount came from such nonbank sources as insurance companies and small loan companies.[8] Among those business concerns unable, for one reason or another, to obtain adequate credit accommodation upon reasonable terms from the usual private lending sources, there are a number which have obtained financial assistance from the Reconstruction Finance Corporation. During 1948 and 1949 the RFC received over 18,000 applications for loans totaling $2.7 billion; of this number 13,479 were acted upon, and 8,100 were approved for a total of roughly $1 billion. Following the outbreak of the Korean conflict, the V-loan guarantee program was reactivated, and as of December 31, 1951, a total of 854 loans, aggregating $1,395 million, had been authorized. Of this number, nearly half were obtained by business concerns with total assets of less than $500,000, and 13 percent by businesses with total assets of less than $100,000.

Summing up the available evidence, it appears that by and large the short-term financing requirements of small business, and even its intermediate-term financing needs, discussed below, are being met more adequately by the commercial banking system at the present time than was the case 25 years ago. There are probably some areas in which present commercial banking facilities are not entirely adequate or are not being fully utilized in meeting the bankable credit requirements of small business concerns, and there are undoubtedly some concerns which, for one reason or another, cannot get all the bank credit that they feel is justified. It is essential, however, that this fringe of unsatisfied small business claimants for bank credit be distinguished from the great mass of small businesses whose bankable credit requirements are being fully met and whose unsatisfied demands for additional financing, if any, reflect a need for long-term borrowed and/or equity capital.

Intermediate-term borrowed capital.—It is difficult to evaluate changes in the supply of intermediate- and long-term credit available to smaller business concerns with any degree of precision. A number of factors have to be taken into consideration, including the impact of higher taxes on earnings and investment incentives, the diverse activities and capital requirements of small business, and the changing importance of different suppliers of long-term funds. There are, however, enough differences between intermediate- and long-term borrowed capital and equity capital to warrant separate consideration of each.

The most significant developments affecting the availability to small business concerns of intermediate-term borrowed capital of up to 5 years or more in maturity have been (1) the evolution of term lending and of installment equipment purchase loans by commercial banks,

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[8] Loughlin F. McHugh, Financing Small Business in the Postwar Period, Survey of Current Business, November 1951.

(2) the gradually increasing importance of life insurance companies and other institutional investors as suppliers of business funds, and (3) the decline in the cost of borrowed capital relative to equity capital.

As regards the prewar development of commercial bank term lending to business, a basic study by the National Bureau of Economic Research has summarized it as follows:

> In the medium-term field the term loan grew from negligible amounts in 1933 to a point where, in 1940, such loans held by commercial banks equalled one-half of all corporate securities held by the banks. * * * The evidence suggests, at least, that the tendency was for term loans to be made in smaller average amounts, increasingly to smaller companies, and, toward the end of the period, increasingly for new money as contrasted with refinancing purposes.[9]

The Federal Reserve's postwar survey of member bank loans to business revealed that in the latter part of 1946 small business, as defined in an earlier reference in this reply, accounted for 81 percent of the number and 13 percent of the dollar amount of member bank term loans outstanding at that time. While comprehensive data of more recent date are not available, various studies suggest that term loans have been an important source of intermediate credit for smaller businesses throughout the postwar period.

Judging from the results of the Federal Reserve's postwar loan survey, the number of installment repayment equipment loans to small business concerns must today be very large although their dollar volume may not represent a large proportion of total outstanding business loans. The development of this and similar forms of lending appears to have facilitated the financing of small business intermediate-term credit requirements.

Long-term borrowed capital.—While developments during the past 25 years have been in the direction of making short- and intermediate-term credit more readily available to smaller businesses, this may not be the case so far as long-term borrowed capital is concerned. As the demand for the debt obligations of smaller and relatively unknown concerns is limited geographically, they must rely largely upon local sources which may or may not be adequate for the demand. Moreover, the effect of the progressive personal income tax and the somewhat greater risk associated with small businesses limit incentives to long-term investment in such enterprises.

On the other hand, there have been certain developments since the mid-twenties which have tended to make long-term borrowed capital somewhat more available to smaller businesses. One of these, the growth in resources and investment activities of such institutional investors as life insurance companies and mutual savings banks, has been discussed in answer to Question H–54. The smaller life insurance companies in particular have been active in developing longer-term credit facilities for business concerns including moderate-sized enterprises in their local areas.

Another development is a gradual but marked decline in long-term interest rates during the past two decades, while the cost of equity in relation to debt capital has increased appreciably, particularly during the postwar period. If the cost of borrowed capital is adjusted for the savings in income and excess profits taxes result-

[9] N. H. Jacoby and R. J. Saulnier, Business Finance and Banking, National Bureau of Economic Research. New York, 1947.

ing from the treatment of interest as a deductible expense, the net cost of long-term credit at the present time compares even more favorably with the cost of equity capital.

Equity capital.—Relatively high levels of profits during the war and postwar periods have provided many business concerns with equity funds which might otherwise have had to be obtained from external sources. In addition, the capital gains tax rate of 25 percent has favored retention of earnings, particularly by smaller, closely held corporations, rather than payment of dividends which are subject to higher personal income tax rates. As far as equity capital obtained from external sources is concerned, it should be recognized at the outset that the reluctance of many small businessmen to share ownership and management prerogatives with outsiders has been and will continue to be the major deterrent to such financing. Apart from this reluctance of small businessmen to employ equity capital supplied by outsiders, it is also probably true that the availability of such funds has diminished somewhat during the past 25 years. The explanation for its apparent curtailment in recent years is complex, and may best be summarized from the standpoint of individual and institutional investors and of the average small business concern.

In earlier periods investment by individuals of their savings constituted one of the principal sources of external equity capital for small business. As far as the proprietors of small businesses are concerned, it is still true that their own personal savings provide the greater part of the initial capital of newly formed enterprises. As regards individuals' equity investment in business concerns of which they are not the proprietors, a growing preference for security and liquidity of investment, an increasing tendency for individuals to channel their savings into life insurance companies, mutual savings banks, and other institutional hands, and a mounting burden of personal income and corporate income and excess profits taxes have combined to restrict the amount of such investment. As a nation we have tended in recent years to stress security at the expense of opportunity. That this feature of national philosophy continues to be strong, as far as investments are concerned, is confirmed by the most recent Federal Reserve Board Survey of Consumer Finances, which indicates that a substantial proportion of consumers in the $7,500 and over a year income group prefer assets of definitely determinable dollar value, such as Series E savings bonds, rather than stocks whose prices are subject to wide fluctuations.

Despite present high levels of individual income taxes, the volume of savings available for investment is substantial, but the progressive income tax has diminished the incentives for well-to-do individuals to invest their funds in equity securities and has caused them to seek investment outlets among tax-exempt State and local government securities. Under the provisions of the Revenue Act of 1951, for example, a single person with an income of $100,000, would have to receive a before-tax return of 25 percent on a common stock investment to realize the same after-tax return as from a 2.5 percent tax-exempt security. Considering the price and other risks attendant upon common stock ownership, the after-tax yield on such investments is not sufficiently attractive to wealthy individuals to justify their purchase, unless the prospects of capital gains, arising out of appreciation in investment values and subject to the lower capital gains tax, are very great.

While substantial amounts of investment funds have accumulated, and are continuing to accumulate, in the hands of insurance companies and other institutional investors, only a nominal proportion of these funds may be considered available for the purchase of small business equity shares. For one thing, many of these institutional investors are restricted by statute and supervisory authority to relatively modest holdings of common stock in relation to their total assets; for another, both statutes and investment preferences of these institutions limit their purchases of common stocks to well established, nationally known companies.

Problems encountered by small business in obtaining equity capital from external sources.—Apart from the reluctance of many proprietors of small or moderate size businesses to share ownership and control with outsiders, there are certain important deterrents to financing small business equity capital requirements from external sources. Since many smaller business concerns are unincorporated, equity investment involves partnership status and responsibilities which many individuals are unwilling to assume and many small business proprietors are unwilling to accept. Most small corporations, moreover, are unable because of their size to utilize the securities market effectively, partly because of the difficulties and expense of preparing and marketing security issues and partly because of the unwillingness of investors to buy stock in relatively untried and unknown concerns. In addition, the high cost of equity relative to debt capital and the tax disadvantages of equity as contrasted with debt financing are more serious considerations for small concerns than for large companies. The somewhat greater risk associated with equity investment in small concerns whose markets may be limited and whose lack of product diversification renders them more vulnerable to shifts in demand and economic depression must be compensated for by higher dividend yields in order to attract investors. On the other hand, the smaller companies whose sales and profits are expanding rapidly benefit more than the larger concerns from interest deductions in the computation of income, and particularly excess-profits, taxes.

(*b*) *Economic consequences of greater financial aid to small business*

A strong and healthy small business population with ample opportunity for continued growth and development is an essential part of the American free-enterprise economy. Every effort should be made to preserve equality of opportunity in the field of business endeavor by the elimination of discriminatory or preferential trade and labor practices and tax treatment, and by providing opportunities for business concerns of all sizes to share in the common fund of managerial, technical, and financial knowledge. Ready availability of capital and credit to business concerns of all types and sizes is of course one of the factors essential to the successful operation of a free enterprise competitive economy, and if it were conclusively established that whole sectors of the business population were denied access to capital and credit, then steps should be taken to remedy the situation.

Equality of opportunity for business concerns should not be interpreted to mean that all claimants to the manpower, material, and financial resources of the nation shall have their claims met in full, or that these resources shall be prorated among the claimants in accordance with some arbitrary definition of need. On the contrary, competitive bidding for resources is one of the essential features of a private enterprise economic system. In such an economic environment, the more efficient concerns will come closer to fulfilling their requirements than those which are less efficient, with the inevitable result, since resources are not inexhaustible, that particular concerns may suffer in some sense from an inadequacy of one or another resource.

To attempt to fulfill the demand of these marginal claimants may not only prove wasteful of the economy's resources, but, by perpetuating the inefficient business concern in competition with those better able to utilize such resources with greater efficiency, may reduce the general level of economic competence and threaten the existence of more efficient concerns. The problem, therefore, is one of assuring maximum opportunity without resorting to open or disguised subsidies which may in the end destroy the kind of an economy that it is in the public interest to preserve.

In the case of short- and medium-term business credit, particularly that which is supplied by commercial banks, the available evidence strongly suggests that by far the greater part of the legitimate requirements of creditworthy business concerns, both large and small, are being met in their entirety. A substantial proportion of the commercial banking business is itself small business, and small manufacturing, trade, service, utility, and construction firms comprise the principal, if not the only, market for the loans of these small banks. The latter, therefore, may generally be relied upon in their own best interests to develop their lending opportunities as fully as is permitted by statute and is consistent with their responsibilities to depositors.

The question whether existing sources of long-term borrowed and equity capital are adequate for meeting the requirements of smaller businesses may be, and has been, debated at length. The fact that many thousands of new business enterprises have been established since the end of World War II would suggest that private initiative has not been seriously handicapped by an over-all shortage of capital, though undoubtedly there are situations in which lack of capital has prevented the establishment or retarded the growth of some business concerns. Lacking conclusive evidence of the fact that a general capital shortage has retarded the establishment and development of small businesses, it can only be said that a more readily available supply of such funds might contribute to the diffusion of economic power and to strengthening the dynamic character of the economy.

(c) Methods of facilitating small business financing

From time to time various proposals have been advanced for facilitating the provision of short- and long-term credit and equity capital to small business, and a number have actually been adopted with varying degrees of success both in this country and abroad. The newer developments in commercial bank and in Government and Government-facilitated lending have already been mentioned. In addition, there are community development foundations, and organizations that concentrate on the discovery, development, and financing of new technological processes and products. Each of these financing mechanisms has, within the limits imposed by its specific objectives, contributed to the financing of small business, but no one by itself is intended to satisfy all small business financing requirements.

Of the more recent, and as yet untried, proposals for facilitating the provision of short-, medium-, and long-term credit and equity capital to small business, those which have received the greatest attention are insurance of commercial bank loans, and the establishment of capital banks or national investment companies to supply long-term debt and equity capital.

Various loan guarantee and insurance proposals have been made from time to time. In January 1947 a bill (S. 408) was introduced in the Congress to repeal Section 13b and amend Section 13 of the Federal Reserve Act to provide for the guarantee of loans made by any chartered banking institution to an established business enterprise. The *working capital* and *5-year maximum maturity* restrictions which governed lending under Section 13b were modified in the provisions of S. 408 to permit guarantee of loans having an initial maturity of not more than 10 years for any purpose. One of the purposes of this proposal was to utilize the existing regional facilities and established banking connections of the Federal Reserve System, as well as the experience gained by the System under the 13b and Regulation V programs. During the winter and spring of 1950 bills were introduced in the Senate and House of Representatives which provided for the insurance of small loans with maturities of not more than 5 years. The principal amount of an insured loan could not exceed $25,000 under one bill, or $10,000 under the other. Total insurance protection afforded to any financing institution would be limited to 10 percent of the aggregate amount of its total insured business loans, and the insurance coverage on any one loan would be not more than a certain percentage of the unpaid balance—90 percent under one bill and 95 percent under the other. An insurance fee or premium charge would be levied on each insured loan and the proceeds used to establish an insurance fund to cover any realized losses.

Those who favor the establishment of a loan insurance or guarantee program stress the need for pooling the risks attendant upon lending to newly established and small businesses in order to reduce credit investigation and servicing costs. At the present time loans to small businesses in smaller communities are made largely on the basis of the local banker's personal knowledge of the applicant's abilities, character, and financial worth, without reliance on costly credit investigation. However, in the case of newly established business enterprises and of small concerns in larger communities, the banker's contact with the prospective borrower may be impersonal or casual, and loans may be granted only on the basis of thorough credit investigation, the cost and difficulties of which act as a deterrent to borrowing. If the risks involved in lending to small business concerns were pooled, however, banks could make such loans on the basis of somewhat less detailed credit investigation, but there is no certainty as to how much of an over-all increase in bank lending to small business might result from such a pooling of risks.

Long-term borrowed and equity capital.—As far as long-term borrowed and equity capital are concerned, the bills introduced in 1950 also provided for the establishment of national investment companies whose primary function would be to finance small and intermediatesized business concerns and to provide managerial and technical assistance. It was contemplated that these investment companies would be organized by or under the auspices of the Federal Reserve System in order to assure adequate initial capital essential to their successful operation. It was also contemplated that ownership of these investment companies would eventually pass to private financial institutions and individuals, and that they would be operated as profit-making enterprises in accordance with sound lending and investment principles. These investment companies would have the authority to extend long-term loans or purchase equity shares. It was assumed that financial assistance would be tailored to the specific needs of individual concerns, and that in many cases some combination of debt and equity capital would be employed. In order to make sure that small business concerns would not be neglected in favor of larger companies, loan and security purchases for individual concerns in excess of $300,000 would be limited to one-third of the combined capital, surplus, and outstanding indebtedness of any national investment company.

While there might be some overlapping of services provided by the proposed investment companies with those offered by commercial banks and investment bankers, such duplication would probably occur to only a limited extent. In the first place, the proposed investment companies, if operated as intended, would direct their lending and investment activities primarily to providing long-term borrowed and equity capital to smaller business concerns, which do not currently have access to the organized securities markets. Second, investment companies themselves would be expected to supplement their capital funds by borrowing from banks or in the capital market at market rates of interest, and would not compete in their charges with rates of interest which banks, using deposit funds, can charge their customers. Third, both the credit appraisal costs and the risks of an institution specializing in long-term capital and credit would run much higher on the average than in the case of commercial banks which make shorter-term and better-secured loans. Fourth, the success of this new type institution would depend largely on its effectiveness in working through commercial banks since they alone are in a position to discover and evaluate investment opportunities in their communities and to handle the supervision and servicing of such investments in an economical manner.

Since the extent of the need for such a supplementary financial institution as the proposed investment company is unknown, it was suggested at the time by the Federal Reserve that, if a bill were enacted to authorize the establishment of such companies, it would be preferable to experiment with one or two on a pilot-plant basis before attempting to set up a nationwide group of such institutions.[10] If, on the basis of demonstrated need for such facilities and their operating experience, it was deemed advisable to increase the number of such institutions, this could be done as credit demands and economic conditions warranted.

In considering the advisability of providing loan insurance or guarantee and/or additional long-term credit and equity capital for smaller business concerns, careful attention should be paid to existing economic conditions. Thus, in a period of sustained in-

[10] Statement of Thomas B. McCabe, Chairman of the Board of Governors of the Federal Reserve System, before the Senate Committee on Banking and Currency, June 27, 1950.

flationary pressures such as existed following the outbreak of the Korean conflict, or might arise in times of large-scale Treasury deficit financing in connection with a defense or war effort, it would be unwise to enlarge general credit facilities. On the contrary, during such a period every effort should be made to curtail the use of credit for nonessential purposes and to divert available funds to essential uses. Where additional funds are required to assure defense production, such methods as the loan program under Regulation V would seem adequate for this purpose.

59. Discuss the effects of bank examinations on the lending policies of banks, particularly as they apply to loans to small businessmen. Distinguish if necessary between examinations by different examining authorities.

Commercial banks have a primary responsibility to their depositors for maintaining loan and investment portfolios in good condition. As explained in the answer to Question F-37, the fundamental objectives of bank examination are to determine the solvency of an institution, to ascertain if the business is conducted in accordance with provisions of law, and to determine the character and competency of the management. Achievement of these objectives should disclose whether or not a bank is fulfilling its responsibility to depositors.

Adverse appraisal and classification of individual loans and adverse comments by an examiner on concentrations in types of loans inevitably influence the attitude of the banker toward the acquisition of loans of like or similar character. It should be borne in mind, however, that if the banker, on his own initiative and guided by his own good judgment and sense of responsibility, operates on a sound basis, there is little if any occasion for criticism by the examiner.

Bank examination policy is not immediately or directly concerned with the size of a loan or the size of a borrower's business, except that Federal law and the laws of the States contain restrictions, based on the amount of the bank's capital and surplus, on the maximum amount that may be loaned to an individual customer on various types of loans.

It is believed that supervisory influence has tended to improve or, where already satisfactory, to maintain the quality of bank assets, including loans. The extent of this supervisory influence and its localization as to any class or size category of borrowing, however, can be measured only by bankers themselves because they alone know how much effect the examiners and supervisory agencies have upon their credit policies.

As stated in the answer to Question F-37, the uniform examination agreement of the three Federal supervisory agencies and the Executive Committee of the National Association of Supervisors of State Banks, adopted in 1938 and amended in 1949, was designed, through emphasis on intrinsic value, to prevent appraisals of bank assets in bank examinations from being unduly influenced by currently favorable conditions existing during a local or national boom period and the reverse during a period of decline. The agreement also operates to minimize differences between examiners of the same or different agencies in the fundamental approach to appraisal.

With respect to bank lending to small businessmen, the Board stated at the time the agreement was announced in mid-1938:

> The program adopted is expected to be of benefit both now and in the future in two important respects: first, in broadening the opportunity for small and medium-sized business concerns to obtain credit from the banks on a sound basis, and second, in relieving pressures that tend to reduce outstanding credit or prevent extension of new credit to sound borrowers.

Citation of the specific provisions of the original agreement in 1938 may help to clarify the examiner's approach to the appraisal of loans. Loans were classified in four groups, defined as follows:

> I. Loans or portions thereof the repayment of which appears assured. These loans are not classified in the examination report.
>
> II. Loans or portions thereof which appear to involve a substantial and unreasonable degree of risk to the bank by reason of an unfavorable record or other unsatisfactory characteristics noted in the examiner's comments. There exists in such loans the possibility of future loss to the bank unless they receive the careful and continued attention of the bank's management. No loan is so classified if ultimate repayment seems reasonably assured in view of the sound net worth of the maker or endorser, his earning capacity and character, or the protection of collateral or other security of sound intrinsic value.
>
> III. Loans or portions thereof the ultimate collection of which is doubtful and in which a substantial loss is probable but not definitely ascertainable in amount. Loans so classified should receive the vigorous attention of the management with a view to salvaging whatever value may remain.
>
> IV. Loans or portions thereof regarded by the examiner for reasons set forth in his comments as uncollectible and as estimated losses. Amounts so classified should be promptly charged off.

The amendment of the agreement in 1949 was for the purpose of simplifying and redesignating classifications and involved no fundamental change in procedure or in the standards for classifications of bank assets. In this amendment, loans were included in the broader term "book assets," and the classifications "Substandard," "Doubtful," and "Loss," corresponded generally to the original classifications II, III, and IV.

As amended, the agreement provides that the term "Substandard" shall be defined as follows:

> Book assets or portions thereof not classified as doubtful or loss and which involve more than a normal risk due to the financial condition or unfavorable record of the obligor, insufficiency of security, or other factors noted in the examiner's comments. These assets should be given special and corrective attention, for example, by obtaining suitable reductions in amount, additional security, more complete financial data concerning obligors' condition, or other action as the specific circumstances may require.

The principles of appraisal as defined and adopted by the three Federal supervisory agencies and the Executive Committee of the National Association of Supervisors of State Banks are designed for and believed to be applied to loans of all sizes and without discrimination as between large and small businesses. Moreover, in evaluating the effect of bank examinations on lending policies of banks, it should be remembered that small businesses consistently account for a significant segment of the business loan market of the banking system.

It has already been noted, in answer to Question I-58, (1) that small business concerns have been found to account for a major part of the number and sizable proportion of the dollar volume of total bank loans to business, (2) that small businesses provide the primary loan outlet for the smaller banks, and (3) that large as well as small banks are actively engaged in the development of new lending techniques particularly suited to the needs of small businesses.

There are businesses, which being new and untried from the standpoint of capital, proven capacity, and character, represent less attractive credit risks than established businesses. It is unlikely, however, that such small, and in many cases marginal, concerns would encounter difficulty in obtaining bank credit solely because of bank examination policy. Their problem, which is discussed in the reply to Question I–58, is rather one of meeting general standards of credit-worthiness which would be invoked by any prudent lender irrespective of examination requirements.

APPENDIX TO CHAPTER II

Questions Addressed to the Chairman of the Board of Governors of the Federal Reserve System

A. CONGRESSIONAL POLICY DIRECTIVES

1. State, citing the appropriate statutes, all of the policy directives not given by Congress to the Board of Governors, the Federal Open Market Committee, and the Federal Reserve Banks, stating in each case the operations to which the directive applies.
2. State the general purposes which the Federal Reserve System seeks to further by means of its operations within the very broad range of discretion left it by the Congressional directives. State the general objectives both of all operations taken as a whole and of particular operations—e. g., open market operations—if the objectives of these operations differ in any way from the over-all objectives.
3. Trace the principal credit policy actions of the Federal Reserve System from the System's inception to the present and indicate the explanation of such actions, including their relation to changes in business activity.
4. Discuss the relation of credit and monetary policy to fiscal and other policies of the Government in combating inflation or deflation.
5. Do you believe that the Congressional declaration of policy contained in the Employment Act of 1946, which reads as follows:

> The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means consistent with its needs and obligations and other essential considerations of national policy, with the assistance and cooperation of industry, agriculture, labor, and State and local governments, 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.

is balanced in its emphasis upon high-level employment and price stability respectively, as objectives of Federal Government policy? Suggest any changes by which you think it might be improved.

6. Do you believe that a broad directive with respect to economic policy should be given the Federal Reserve System by Congress? If so, state the general character of the directive which you would recom-

mend. If you believe there should be no such directive, state your reasons for this belief.

B. RELATIONSHIP TO EXECUTIVE BRANCH

7. In the light of the Federal Reserve Act, what is the responsibility of (*a*) the Chairman, (*b*) the Vice Chairman, and (*c*) the other members of the Board of Governors to the President in the performance of their respective functions? If some functions are performed in accordance with policies determined by the President, and others independently of the policy of the President, state which functions fall in each category.

8. Are (*a*) the Board of Governors and (*b*) the Federal Open Market Committee parts of the Executive Branch of the United States Government? If not, what is their status? Discuss with respect to the constitutional issues involved as you understand them.

9. Trace the background of the provisions in the law for (*a*) a Board of Directors at each Federal Reserve Bank and branch and (*b*) for the presidents as the chief executive officers of the Banks. Discuss the functions of each in the formulation of national credit policies and in the administration of the Federal Reserve Banks.

10. Are the Federal Reserve Banks parts of the Executive Branch of the United States Government? Are they parts of the private economy? What are the implications, advantages, and disadvantages of the private ownership of the stock of the Federal Reserve Banks?

11. Does the Board of Governors follow the practice of submitting its reports to Congress on pending legislation to the Bureau of the Budget to determine whether or not they are in accordance with the program of the President? If it submits some but not all of such reports, what are the criteria by which those submitted are selected? Does the Bureau of the Budget submit proposed reports of the Executive agencies to the Board of Governors for comment?

12. If policies adopted by (*a*) the Board of Governors, (*b*) the Federal Open Market Committee, or (*c*) the Federal Reserve Banks differ from the policies of agencies operating under the direction of the President, what means, if any, are adopted to coordinate the policies? How urgent is the problem of coordination? Give examples.

13. State the matters of common interest between the Federal Reserve and (*a*) the Council of Economic Advisers, (*b*) the Treasury Department, (*c*) the Comptroller of the Currency, (*d*) the Federal Deposit Insurance Corporation, and (*e*) Federal lending agencies generally and describe the steps taken to secure a coordination of policy among them. What suggestions have you for the improvement of coordination between the Federal Reserve System and other agencies having an interest in money and credit?

14. How does the Board of Governors of the Federal Reserve System participate in the determination of the international policy of the United States? How is coordination of policy in this field effected? How successful has this coordination been?

C. DISTRIBUTION WITHIN THE FEDERAL RESERVE SYSTEM OF AUTHORITY ON CREDIT POLICIES

15. Trace the historical development of the process by which the discount rates of the Federal Reserve Banks are set and evaluate the relative authority of the Board of Governors and of the directors of the Federal Reserve Banks in setting discount rates today.

16. Trace the historical development of open market operations covering both their significance as instruments of monetary and credit policy and the nature and composition of the bodies which have successively had control over them.

17. What is the rationale of the present assignment of authority over open market operations to a body other than the Board of Governors? Why should the allocation of responsibility for open market policy differ from the allocations with respect to discount rates and reserve requirements? Do you consider these differences desirable? Why, or why not?

18. Can open market policy, discount policy, and reserve requirement policy pursue different general objectives, or should these various instruments always be directed toward a common policy? When differences of viewpoint among the different policy-determining groups must be compromised in order to adopt a common policy, what are the factors of strength and weakness in the position of each of the parties to the compromise—i. e., the Board of Governors, the Federal Reserve Bank President members of the Federal Open Market Committee, and the boards of directors of the Federal Reserve Banks?

D. ORGANIZATION OF THE BOARD OF GOVERNORS

19. What qualifications are required by statute for appointment to the Board of Governors? Would you suggest any changes in these statutory qualifications?

20. Would there be any advantage in removing the present requirement of law that not more than one member of the Board of Governors may be appointed from a single Federal Reserve district? Would it be desirable to replace it by any other type of geographical limitation?

21. What are the advantages and disadvantages of the present 14-year term of appointment for members of the Board of Governors, and the 4-year term of designation of the Chairman and Vice Chairman? Would you suggest that any changes be made in the tenure or manner of appointment of members or in the tenure or manner of designation of the Chairman and Vice Chairman?

22. What would be the advantages and disadvantages of reducing the number of members of the Board of Governors or of replacing the Board by a single head?

E. EARNINGS AND EXPENSES OF THE FEDERAL RESERVE SYSTEM

23. What have been the annual expenses of:

(*a*) The Board of Governors,

(*b*) The 12 Federal Reserve Banks combined (which include assessments for expenses of the Board of Governors),

for each year since the inauguration of the System? To the extent practicable, state expenses both inclusive and exclusive of reimbursable fiscal agency expenses. Relate these expenses in each year since 1919 to (i. e., express them as percentages of available figures):

(*a*) Total expenses of all member banks, and

(*b*) Gross national product of the United States.

(The purpose of these comparisons is to "deflate" the expenses of the System by factors which roughly measure its work load and reflect changes in the price level.)

24. Are the expenses and other accounts of the Board of Governors or of the Federal Reserve Banks subject to any budgetary or audit control of any other agency of either Congress or the Executive Branch of the U. S. Government? If not, do you believe that they should be? Why, or why not? Describe budgetary and auditing procedures now in effect.

25. What have been the total gross earnings of the 12 Federal Reserve Banks combined in each year since the formation of the System? Give a breakdown of earnings by sources, and show profits and losses on the sale of United States Government securities for each year.

26. Present classified statements of expenses of the 12 Federal Reserve Banks combined for each of the past 5 years, classifying in such detail as you consider appropriate for an analysis of the principal operations of the System.

27. List and discuss any expenses which have been incurred since 1946 by the Board of Governors, or to the Board's knowledge have been incurred by the Federal Reserve Banks, for the purpose of influencing public opinion on controversial matters in connection with monetary and credit policy and in connection with the management of the public debt. Expenses for the preparation of material in standard expository format and for the distribution or presentation of such material in written or oral form to persons who might be expected to have a regular business or professional interest in it may be omitted. Any expenses during this period for the preparation of motion pictures, illustrated brochures, or any other special material in these fields should be included, however, irrespective of your personal opinion as to whether or not the material they contain is controversial in character, in order that the Subcommittee may, if it desires, consider them on a case-by-case basis. (This question is to be answered in collaboration with the Presidents of the Federal Reserve Banks.)

F. GENERAL CREDIT AND MONETARY POLICIES

28. Discuss the factors that determine the quantity of money and its adequacy for the functioning of the economy. Cover the influence of Federal Reserve credit policies over changes in the quantity of money.

29. Discuss the fundamental issues between the Treasury and the Federal Reserve System between the end of the war and the "accord" announced by these agencies on March 4, 1951. Describe fully the "accord" between the Treasury and the Federal Reserve System which was announced then.

30. Analyze the effects of the rising yield upon short-term Govern-

ments between August 1950 and March 1951, from the standpoint of (*a*) effect upon the volume of bank loans, (*b*) effect upon the level of private interest rates and the differential between those rates and the yield on Governments, (*c*) effect upon the market prices and the volume of sales of long-term Governments, (*d*) effect upon the policy of the Federal Reserve to support the long-term Governments.

31. Describe the mechanism by which a general tightening or easing of credit, and the changes in interest rates which may result, is expected to counteract inflation or deflation. Discuss the impact on borrowers and lenders in both the short-term and long-term credit markets and on spending and savings. Indicate the effect on each of the broad categories of spending entering into gross national product. What are the (actual or potential) capital losses or gains that would be brought about by changes in interest rates? To what extent is the effectiveness of a program of credit restraint affected by or dependent upon expectations with respect to subsequent changes in interest rates? Distinguish in your discussion between small changes in rates and large changes in rates.

32. How rapidly and to what extent would you expect the volume of bank loans to respond to measures of general credit control under present conditions?

33. Compare the applicability of general credit and monetary measures and the resultant increases in interest rates as a means of restraining inflation (*a*) when the Treasury is not expected to be a large borrower in the foreseeable future, (*b*) when a large volume of Treasury refunding operations will have to be effected in the foreseeable future, (*c*) when it is expected that the Treasury will be a large net borrower during the foreseeable future, and (*d*) under conditions of total war.

34. To what extent is the demand for Government securities and other high-grade, fixed-interest-bearing securities by nonbank investors influenced by (*a*) the current level of interest rates, (*b*) expectations with respect to changes in interest rates, and (*c*) other factors?

35. What is the reason for the relatively slight use by commercial banks of the Federal Reserve discount and borrowing privilege? Do you believe that greater reliance should be placed on this privilege as a means of obtaining Federal Reserve credit? Under what conditions, if any, would you expect to see a greater use made of the discount privilege?

36. Do you believe that there is any conflict between measures to restrain excess demand by credit control and the need for expanding the economy to meet the requirements of a continuing readiness to resist aggression and of a continuing high standard of living? If so, how can the effects of this conflict be mitigated?

37. What do you believe to be the role of bank examination and supervision in furthering the objectives of the Employment Act.

38. What selective regulations other than those over stock market credit, consumer credit, and real estate credit do you consider to be feasible? What would be their applicability under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33?

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39. What do you consider to be the role of selective regulation of stock market credit in restraining inflation under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33?

40. What do you consider to be the role of selective regulation of consumer credit in restraining inflation under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33? What attention should be given by the controlling authority to inventories and price and employment changes in the particular industries affected by the regulation? Discuss the operation of Regulation W since its revival in the fall of 1950.

41. What do you consider to be the role of selective regulation of real estate credit in restraining inflation under the conditions of each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33? Discuss the operation of selective regulation of real estate credit during the past year.

42. Explain and evaluate the Voluntary Credit Restraint Program which has been developed during the past year. What are the precautions taken to insure fair treatment to competing firms? What do you consider to be the role of voluntary credit restraint under each of the assumptions with respect to the magnitude of Government borrowing stated in Question 33?

43. Discuss the use of moral suasion as a tool of credit control. How has this been used in the cases of member banks and of savings institutions, including life insurance companies?

44. What is the function of bank reserves? What are present reserve requirements with respect to banks?

45. Should nonmember banks be required to maintain the same reserves as member banks? Why, or why not?

46. Discuss the advantages and disadvantages of basing reserve requirements on types of deposits irrespective of the geographical location of banks.

47. Discuss and evaluate the advantages and disadvantages of requiring additional reserves which might be held in whole or in part in the form of Government securities. Illustrate with a specific plan or plans.

48. Discuss the advantages and disadvantages of requiring during the national defense emergency a supplementary reserve to be maintained against *increases* in either loans and investments or deposits.

49. Discuss and evaluate the advantages and disadvantages generally of maintaining bank reserves against classes of *assets* rather than against classes of liabilities as at present.

50. State the statutory authority for the power, if any, of the Board of Governors, the Federal Reserve Banks, or of any agency of the U. S. Government to control directly or to "ration" the extension of credit by individual banks. Specify the (legal) circumstances under which such rationing could occur and the control of the President over its operation.. Under what (economic) circumstances, if any, would you recommend the use of credit rationing? Describe the manner in which you believe that such a system would operate.

G. INTERNATIONAL COMPARISONS

51. Discuss and evaluate, as far as your available information permits, the relationship between the Executive, the Treasury, and the Central Bank in foreign countries. Place particular emphasis on the resolution of policy conflicts.

52. Discuss and evaluate, as far as your available information permits, the relative use of selective and general credit controls in foreign countries.

53. Discuss and evaluate, as far as your available information permits, any devices used in foreign countries to insulate the market for government securities from the private credit market.

H. THE BANKING STRUCTURE

54. Trace the principal changes in the functions and activities of commercial banks since the establishment of the Federal Reserve System, with special emphasis on the periods since the middle thirties. Cover changes in the various types of assets and liabilities.

55. Trace the changes in the number and character of banking facilities since the establishment of the Federal Reserve System, with special emphasis on the period since the middle thirties. Cover changes in the number of banks, in the supervisory jurisdiction of banks, and in multiple office banking.

56. Trace the course of the earnings and expenses of all member banks from the first year (1919) for which such data are available to the present time. Cover especially the following points: (*a*) the gross amounts of earnings and expenses and of current net earnings and net profits; (*b*) the ratios of current net earnings and of net profits to total capital accounts; (*c*) changes in the relative importance of different sources of earnings, especially (i) loans, (ii) investments other than United State securities, (iii) United States securities, and (iv) service charges—distinguish as far as possible between current earnings and profits and losses on sales or disposition of securities; (*d*) changes in the relative importance of different categories of expenses, especially (i) wages and salaries, (ii) interest on time deposits and borrowed money, (iii) taxes, and (iv) deposit insurance assessments—this may be estimated if this item was not shown separately in bank earnings reports.

57. (*a*) Present an analysis supported by statistical tables, by 10-year intervals over the period 1920–50, of the number of banking facilities in relation to population by States.

(*b*) Present a similar analysis on a county basis for the year 1950.

(*c*) If there is any evidence of inadequacy of banking facilities in some cities, counties, or larger areas, what are your suggestions for measures to remedy such inadequacy?

I. AVAILABILITY OF CAPITAL FOR SMALL BUSINESS

58. Discuss the changes which have occurred during the last 25 years in the ease or difficulty with which small commercial and industrial businessmen have been able to raise capital or to borrow. What in your opinion are the reasons for such changes as you find to have occurred? Do you believe that a more liberal supply of capital and

credit to small business would contribute to the diffusion of economic power and to the dynamic character of the economy? What steps could be taken to bring about a more liberal supply of capital and credit to small business? Do you believe that any of these steps would be desirable? Distinguish between the longer-term aspects of the problem and those of particular importance today during the current national defense emergency.

59. Discuss the effects of bank examinations on the lending policies of banks, particularly as they apply to loans to small businessmen. Distinguish if necessary between examinations by different examining authorities.

CHAPTER III

REPLY BY WILLIAM McC. MARTIN, JR., CHAIRMAN OF THE FEDERAL OPEN MARKET COMMITTEE

(In Collaboration With Allan Sproul, Vice Chairman)

1. Explain the reasons why the Federal Open Market Committee confines its dealings in United States securities to a small number of "recognized" Government security dealers. Trace the history and explain the mode of operation of this restriction of dealings to recognized dealers.

The number of dealers qualified to transact business in United States Government securities with the Federal Reserve for its open market account is limited primarily by the fact that there is only a small number of dealers with ample capital who make primary markets[1] in all classes of Government securities. These standards for qualification and other requirements which are fully described below, were adopted in order to promote the development and maintenance of an active market for Government securities, independent of Federal Reserve transactions.

Purchases and sales of United States Government securities by the Federal Reserve Banks are effected in the Government securities market by the Federal Reserve Bank of New York under the direction of the Federal Open Market Committee. Such purchases and sales are made for the System open market account in which all the Federal Reserve Banks have a participation. The Federal Reserve Bank of New York transacts business with dealers in Government securities (including certain dealer-banks), and may also do business on the stock exchange through qualified member firms. It does not do business directly with banks or other investors, except to a limited extent with the United States Treasury and with foreign central banks and international organizations having accounts with the Reserve Bank.

The Committee has directed the Federal Reserve Bank of New York to transact business in Government securities for the System open market account with responsible dealers (or through responsible brokers) who meet certain qualifications prescribed by the Committee and agree in writing to comply with the terms and conditions prescribed by the Committee. There are now 10 dealers in Government securities, including 5 dealer-banks, who have met such qualifications and have made such written agreement.

Underlying these standards of qualification are certain basic principles, of which the most important is that there should be an active market for Government securities among investors and dealers, in-

[1] To make primary markets dealers must be willing to buy and sell for their own account reasonable amounts of securities at their quoted prices.

dependent of Federal Reserve transactions. The satisfaction of normal buying and selling desires of investors should be the primary function of the dealers, who endeavor to match off buyers and sellers at prices determined by the balance of supply and demand, but who are prepared to increase or reduce their own portfolios when necessary to balance what appear to be temporary excesses of demand or supply.

The specific purposes served by the System's open market operations have a bearing upon its relations with dealers in Government securities. Primarily Federal Reserve open market operations are designed to influence the availability of credit, and secondarily they may be used to maintain an orderly market for Government securities. The System aims to conduct its operations so as to promote the effective functioning of the market mechanism, not to replace that mechanism. In addition, in its orderly market operations it seeks to accomplish its purposes with a minimum of buying and selling. This is best done by operating to supplement the activities of dealers when temporary imbalances between demand for and supply of securities are of such a magnitude as to threaten disorderly conditions. An orderly market should be maintained and there should be preparation to intervene whenever imbalance develops and dealers are unequal to the task.

In determining those with whom the Federal Reserve System might do business, there are two broad approaches: (1) the System might deal directly with any investor or dealer who wishes to buy or sell Government securities; or (2) the System might deal with that portion of the Government securities market where the *final* effort at *private* purchase and sale takes place.

It has been the view of the Committee that if the first alternative were followed the System would run the risk of becoming almost the sole market for Government securities and, therefore, of losing the opportunity for discretion or initiative in its open market operations for the purpose of affecting the supply of bank reserves. Under the second alternative, investors would continue to effect their transactions in Government securities through ordinary market channels with or through brokers and dealers of all sizes in all parts of the country, and the bulk of all transactions would be effected privately.

In order that System actions relating primarily to credit policy may be readily completed and that actions relating primarily to orderly markets will not result in unnecessary recourse to the System, the Open Market Committee has adopted the second alternative. It has followed the practice of effecting its purchases and sales of Government securities only with dealers who make primary markets, have broad national contacts, do a large volume of business in all types of these securities, and have the capital to support the requisite volume of credit. The standards of qualification are built around these considerations. Restricting Federal Reserve business to dealers who meet these standards (through whom in the ordinary course of events the greater part of the business ultimately flows) was considered desirable, for it is better calculated to preserve a Government securities market in which brokers and dealers, both large and small, might continue to participate. The problem of drawing the line between qualified dealers and others is not always easy, but unless the System is to undertake to buy and sell directly with everyone, a line must be drawn.

History.—For many years the Federal Reserve Bank of New York, in buying and selling Government securities for the System open market account, dealt only with brokers and dealers who met certain standards which the Reserve Bank believed essential. The concerns with which it was willing to do business were sometimes referred to as "recognized dealers." Before determining to do business with such a dealer the Reserve Bank considered the following factors:

(*a*) Reputation for integrity, experience, and knowledge;

(*b*) Capital at risk of the business;

(*c*) Willingness to make markets under all ordinary conditions and to take positions both long and short; and

(*d*) Large volume of national scope, with the contacts which such trading provides.

The Reserve Bank's policy with respect to the execution of purchases and sales of Government securities for account of the System open market account was reviewed and restated by the board of directors at its meeting on November 2, 1939. It was the policy of the Bank, as so restated, in executing purchases and sales of Government securities for account of the System open market account, to effect such purchases and sales through ordinary market channels with or through recognized dealers. The term "recognized dealer" was defined to mean a firm or corporation which was a substantial dealer or broker in Government securities and furnished the Bank with a recent statement of assets and liabilities and such other information as the Bank requested, showing to the Bank's satisfaction that the firm or corporation was a substantial dealer and had in the judgment of the Bank adequate capital and was otherwise in a satisfactory financial condition. It was further provided that purchases and sales of Government securities for the System open market account might also be effected with or through responsible concerns other than "recognized dealers" under limited circumstances when this would probably aid in the execution of System open market policy.

The determination of those dealers with whom the Reserve Bank would do business was made by the senior officers of the Bank on the basis of this policy. Although the dealers furnished financial statements and other information and material to the Bank, the dealers were not asked to sign any formal agreement. This informal arrangement continued until 1944.

Late in 1943 and in 1944, the Federal Open Market Committee made a through study of the relationships with the dealers through whom transactions for the System open market account were executed. The Committee felt that, although the informal arrangement that had existed previously was satisfactory for a period when the volume and amount of transactions for the System open market account were relatively small, the increase in the activity of the account, and the likelihood that operations in very large amounts would continue during the remainder of the war and into the postwar period made it desirable to place existing relationships on a formal basis. Accordingly, at its meeting on February 29, 1944, the Committee approved a statement of the terms upon which the Federal Reserve Bank of New York would transact business with brokers and dealers in Government securities for the System open market account.

This statement defined and clarified the oral understanding which the New York Reserve Bank had had with dealers up to that time. The statement was put into the form of an agreement whereby the dealers and brokers qualifying to transact business with the System account agree in writing to meet the qualifications and to comply with the terms and conditions set forth in the statement. The factors to be considered in determining whether the Federal Reserve Bank of New York will transact business with a particular dealer are set forth in the statement as follows:

(*a*) Integrity, knowledge, and capacity and experience of management;

(*b*) Observance of high standards of commercial honor and just and equitable principles of trade;

(*c*) Willingness (in the case of a dealer) to make markets under all ordinary conditions;

(*d*) The volume and scope of business and the contacts such business provides;

(*e*) Financial condition and capital at risk of business; and

(*f*) The reliance that can be placed on such person to cooperate with the Bank and the Federal Open Market Committee in maintaining an orderly market for Government securities; to refrain from making any recommendations or statements or engaging in any activity which would encourage or stimulate undue activity in the market for Government securities; and to refrain from disclosing any confidential information which he obtains from the Bank or through his transactions with the Bank.

In addition the dealer must agree to submit certain reports and comply with other terms and conditions.

The Committee authorized the executive committee to put into effect the approved procedure and to issue appropriate instructions to the Federal Reserve Bank of New York. Such instructions were issued by the executive committee on May 6, 1944. By May 15 the Federal Reserve Bank had concluded written argeements with all brokers and dealers who, in the opinion of the Bank, met the qualifications prescribed by the Committee, and on May 15, 1944 the new procedure was put into effect. The instructions issued to the Federal Reserve Bank of New York by the Committee, and the statement of terms on which the Bank will transact business with brokers and dealers in United States Government securities for the System Open Market Account were made a matter of public record and are set forth in the 1944 Annual Report of the Board of Governors of the Federal Reserve System, pages 49–51. Copies of such instructions and statement are attached, as Exhibits A and B, respectively.

At the time of the formalization of the procedure in May 1944, there were a small number of other responsible dealers with whom the Reserve Bank had done business occasionally in limited volume who, because of the relatively small volume and restricted scope of their business and the limited amount of capital at the risk of their business, did not clearly qualify under the standards prescribed by the Committee. It was considered inadvisable to qualify dealers who did not clearly meet such standards, and accordingly such dealers were not qualified. It was felt that such an approach to qualification would be helpful to the Federal Reserve System in carrying out its responsibilities, would minimize the possibility of misunderstanding as to who might qualify, and would facilitate action upon future requests for qualification.

Although the names of the qualified dealers appear to be generally known to dealers and informed investors, the Reserve System has never published their names, believing that it should avoid any public act which might be interpreted as disadvantageous to or a reflection upon the dealers who were not qualified.

The number of dealers initially qualified was 12. There have been several changes since then as old firms went out of business or were removed from the list of qualified dealers and as new firms were added to the list. Changes in the list of qualified dealers have been promptly reported to the Open Market Committee.

The number of important unqualified dealers has also changed since 1944, partly in response to changes in the list of qualified dealers, partly because of new firms entering the field, and partly because of older firms retiring from the business. The Federal Reserve Bank of New York has continued to maintain contact with these unqualified dealers and to receive from a number of them, on a voluntary basis, reports of trading volume and position in Government securities and financial statements.

In addition to doing business with the qualified dealers in the over-the-counter market, which is the primary market for Government securities, the Federal Reserve Bank of New York is prepared to do business on the New York Stock Exchange through four member firms, one of which is also a qualified dealer. Since the only Government securities listed on the Exchange are marketable bonds (not notes, certificates, or bills) and little business is done thereon, this type of qualification represents a standby facility.

Continuing review.—The status of individual dealers is under constant review by the Federal Reserve Bank of New York and the conclusions drawn from this review are regularly reported to the Open Market Committee. Each qualified dealer and a number of others submit to the Reserve Bank confidential daily reports on volume of trading and on the long and short position in various categories of Treasury obligations. The data are tabulated to show the relative standing of each dealer in terms of trading volume and trading position. These reports are regularly examined by the Federal Reserve Bank with a view to ascertaining dealer position policies, the degree to which each firm functions as a dealer rather than a broker, and whether or not position holdings are over-extended either as a matter of policy or due to a special market situation. Annual statements of each dealer, including some dealers not qualified, are also carefully reviewed and analyzed to determine any changes in the financial position of the firm, the continuing adequacy of its capital, and changes in management.

Occasionally a dealer will express an interest in qualifying either as a new firm or as one whose trade status has been strengthened. At such times a detailed review is made of all facts bearing on qualification. Since formalizing procedures in 1944 six dealers, including two dealer banks, have requested qualification and two of them have been qualified. Several others who explored the subject of qualification failed to pursue the matter further after an informal discussion of the terms under which they could transact business with the System open market account.

Concluding comment.—The procedure set up by the Federal Open Market Committee has, on the whole, operated satisfactorily under most conditions. In any set of limitations based on established standards, there are bound to be difficult problems of judgment as to borderline cases. Occasionally proposals for relaxation of the terms and conditions of qualification have been received and they have been given careful consideration.

There is no fixed maximum on the number of qualified dealers. The Open Market Committee, through the New York Reserve Bank, has always stood ready to qualify and do business with any dealer who meets the Committee's requirements. Some selection of dealers with whom the System will deal directly is believed to be essential for the reasons stated. Unless the System is to undertake to buy and sell directly with everyone, the impossibility of drawing a line which will not leave some outside the list of qualified dealers is obvious.

When the System was actively supporting the Government securities market, to have permitted a large number of small dealers to qualify to do business with the System might have created difficult problems. In particular, it would have involved the risk of a much greater volume of offerings to the System, since a large group of dealers might have increased the danger of dealers soliciting business against the System's supporting bids. Under the existing arrangement such solicitation of business was more readily minimized.

The Open Market Committee has found that whenever it has intervened in the market to prevent or closely limit any declines in prices of securities, the amount of funds supplied is likely to be large. Since the System operates with high-powered reserve dollars that can serve as a basis for a much greater expansion in credit, such intervention generally results in an injection of reserve funds in excess of the needs of economy. This emphasizes the desirability of operating under such circumstances with a minimum of buying.

In searching for ways and means of improving the System's relationship to the market, the System has solicited suggestions and criticisms, and its practices are under constant study and review. In determining the desirability of any changes, the primary consideration must always be the aims and effectiveness of credit policy and public debt management with reference to the needs of the national economy.

Exhibit A

Instructions Issued to the Federal Reserve Bank of New York by the Executive Committee of the Federal Open Market Committee on May 6, 1944, Relative to the Terms on Which Federal Reserve Bank of New York Will Transact Business With Brokers and Dealers in United States Government Securities for the System Open Market Account

1. The Federal Reserve Bank of New York shall furnish copies of the statement of terms to each broker or dealer in Government securities with whom the Bank has been transacting business on behalf of the System open market account, and to such other brokers and dealers as evidence to the Bank an interest in qualifying and in the opinion of the Bank would have a reasonable chance of qualifying. On and after May 15, 1944, the New York Bank will transact business on behalf of the System open market account only with the brokers and dealers who meet the qualifications, have executed the agreement, and comply with the terms set forth in the statement.

2. When the statement has been presented to the brokers and dealers with whom transactions are now conducted for the System open market account, the Bank shall give copies to representatives of the press informally as a formalization of existing procedure.

3. The Bank shall keep the executive committee of the Federal Open Market Committee informed of each broker and dealer with whom it ordinarily transacts business and of each addition to, or removal from, the list of qualified brokers and dealers.

4. The Bank shall encourage the observance of high standards of commercial honor and just and equitable principles of trade by the brokers and dealers in Government securities, through the medium of the Bank's contacts with the brokers and dealers and the Government Security Dealer Group or any other similar organization that may exist or develop.

5. When any broker or dealer has been removed from the list of qualified brokers and dealers for failure to meet the qualifications set forth in the statement of terms or for willful violation of or failure to perform any of the terms and conditions set forth in the agreement, and the Bank is satisfied that he has taken appropriate steps to correct any default and to prevent the occurrence of similar defaults in the future, the Bank may restore him to the list of qualified brokers and dealers and resume the transaction of business with him, after obtaining the consent of the executive committee of the Federal Open Market Committee.

Exhibit B

Terms on Which Federal Reserve Bank of New York Will Transact Business With Brokers and Dealers in United States Government Securities for the System Open Market Account

The Federal Open Market Committee has directed the Federal Reserve Bank of New York (hereinafter referred to as the Bank) to transact business in United States Government securities for the System open market account with reputable brokers and dealers in such securities who meet the qualifications and agree in writing to comply with the terms and conditions set forth below.

1. In determining whether a person (individual, partnership or corporation, including a bank) is a qualified broker or dealer with whom the Bank will transact business, and the extent to which business will be transacted with such person, the following factors will be taken into consideration:

(*a*) Integrity, knowledge, and capacity and experience of management;

(*b*) Observance of high standards of commercial honor and just and equitable principles of trade:

(*c*) Willingness (in the case of a dealer) to make markets under all ordinary conditions;

(*d*) The volume and scope of business and the contacts such business provides;

(*e*) Financial condition and capital at risk of business; and

(*f*) The reliance that can be placed on such person to cooperate with the Bank and the Federal Open Market Committee in maintaining an orderly market for Government securities; to refrain from making any recommendations or statements or engaging in any activity which would encourage or stimulate undue activity in the market for Government securities; and to refrain from disclosing any confidential information which he obtains from the Bank or through his transactions with the Bank.

2. The Bank will obtain from such person an agreement in writing to comply with the following terms and conditions:

(*a*) He will furnish the Bank with a statement for the confidential information of the Bank and the Open Market Committee showing as of the close of business each business day—

(1) The total amount of money borrowed (directly and indirectly);

(2) The par value of all Government securities borrowed;

(3) His position, both long and short, in Government securities, classified by classes of securities and maturity groups (or by issues, if so requested by the Bank);

(4) The volume of transactions during the day in Government securities, classified by classes of securities and maturity groups (or by issues, if so requested by the Bank); and

(5) Such other statistical data as in the opinion of the Bank will aid in the execution of transactions for the System open market account.

(b) At or before the completion of each transaction with the Bank, he will furnish the Bank with a written notification disclosing whether he is acting as a broker for the Bank, as a dealer for his own account, as a broker for some other person, or as a broker for both the Bank and some other person. In the absence of a special agreement to the contrary with the Bank with respect to a particular transaction, he will not act as broker for any other person in connection with any transaction with the Bank, and he will receive no compensation or profit of any kind in connection with the transaction other than the specified commission paid him by the Bank.

(c) In the absence of special arrangements with the Bank, delivery of securities will be made at the office of the Bank before 2:15 p. m. on the next full business day following the day of the contract and all payments by the broker or dealer will be in immediately available funds.

(d) He will furnish the Bank not less frequently than once during each calendar year with a report of his financial condition as of a date not more than 45 days prior to the delivery of the report to the Bank in form acceptable to the Bank and prepared or certified by a public accountant acceptable to the Bank; and, upon the request of the Bank, he will furnish it with a statement of condition as shown by his books as of a date specified by the Bank.

(e) Unless the Bank shall have informed him of its desire to purchase or sell a particular issue of Government securities, he will not solicit from any other person offerings of or bids for any issue of Government securities for the purpose of placing himself in a position to offer to sell to or to buy from the Bank securities of such issue.

The Federal Open Market Committee has further directed that the Bank decline to transact any further business with a broker or dealer in any case in which the Bank has concluded that the broker or dealer no longer meets the qualifications set forth above or has willfully violated or failed to perform any of the terms and conditions set forth in the agreement.

To the Federal Reserve Bank of New York:

The undersigned hereby agrees to meet the qualifications and to comply with the terms and conditions set forth above.

Dated:________________________ ______________________________
(Signature)

2. To what extent are open market operations impersonal in character and to what extent are they combined with the instrument of "moral suasion"?

It is the desire of the Federal Open Market Committee to conduct all of its open-market operations on a completely impersonal basis and without resort to moral suasion.

When Federal Reserve System open-market operations are conducted solely for the purpose of affecting the availability of credit there need be and is no resort to moral suasion.

When the System was following a policy of buying or selling United States Government securities for the purpose of preventing or closely limiting changes in prices of these securities, it was sometimes thought to be necessary to use moral suasion in order to help limit the volume of support transactions and the consequent effect on bank reserves. Moral suasion of this kind generally involved an appeal for cooperation. Often the request was for voluntary action contrary to the short-run self-interest of the investor or investor groups involved, although in the interest of the country as a whole and perhaps the long-run interest of the particular investor concerned.

This moral suasion took several forms. Federal Reserve authorities attempted by means of occasional speeches, articles, or public statements to explain the open-market policies being followed and the reasons for them, in the hope that cooperation would go with understanding. On certain occasions, officials of the System met with representatives of a particular institutional investor or investor groups to urge such institutions or groups to retain their portfolios of Government securities, or at least to keep their selling of such securities to a minimum and to do this selling in a way that would have the least disruptive effect on the market.

Occasionally when it was believed that dealers were engaging in activities contrary to market support objectives of the Federal Reserve, a form of moral suasion was used to discourage such activities. In some cases dealers solicited business from customers with the intention later of passing the securities to the Reserve System. Such transactions by qualified dealers were discouraged by reminding the dealers of the terms and conditions under which they agree to do business with the System. (See particularly Paragraph 2 (e) in Exhibit B of answer to previous question.) When a nonqualified dealer or professional trader was understood to be engaging in such activities, the System tried to avoid doing any business that involved this dealer until the practice was stopped. Professional elements in the market, usually not qualified dealers, sometimes tried to develop short or long positions at the expense of the System support policy. Where this was believed to be the case, the System attempted to avoid buying from or selling to this sector of the market, so far as it was possible to do so. In order to help avoid such transactions the Federal Reserve, before executing purchases or sales, asked dealers to identify in general terms the customers who wished to sell or buy and to indicate the circumstances surrounding the proposed transaction.

One type of situation which might have an appearance of moral suasion may arise on occasions when, in order to limit its operations, the System follows a policy of purchasing only a portion of securities offered it or of selling only a portion wanted by buyers in the market. Such a policy might give rise to an accusation of discrimination, even though it represents merely a desirable limitation on the amount of bank reserves the System is willing to supply or absorb. In the past, however, when the System was endeavoring to prevent changes in prices of securities, the practice of limited purchases by the System was sometimes accompanied by a form of moral suasion. At certain times when offerings of securities to dealers were heavy and when dealers were unwilling to add to their portfolios at existing prices, they were encouraged, pending an effort to find private buyers, not to mark down their quoted prices even though the System did not immediately buy all of the securities offered and thus clear the market. Since the Government security market is a negotiated market, not an auction market, it was believed that sellers of substantial amounts of Government securities should allow the dealers time to try to find private buyers for the securities being sold. The practice tended to deter some selling. Such a device, however, could be effective for only very brief periods. It had the disadvantage that, if long pursued in the face of insistent selling, it ultimately tended to stimulate more selling of securities than it discouraged.

On the basis of experience, it may be concluded that moral suasion was not a particularly effective means of limiting open market operations over an extended period of time. At best it was effective only within narrow limits and the extent to which it could be exercised had to be carefully judged. It was used sparingly and with caution and only when it clearly appeared to be in the public interest.

The use of moral suasion involved substantial risks. The most serious of these was the possibility that the persuasion or argument used would be interpreted by investors or dealers as a commitment by the Federal Reserve System. A suggestion, for example, that a dealer should absorb more of the market supply of securities by increasing his long position, or that any holder should not sell securities at an existing level of prices, might be taken as a commitment by the Federal Reserve to relieve the dealer or holder of securities later at those prices. On two or three extraordinary occasions before prices were permitted to decline, the System felt itself obligated to purchase securities from qualified dealers' portfolios, an obligation partly moral in aspect and partly related to the necessities of market administration in times of extreme pressure on prices.

Another possible danger inherent in the use of moral suasion was that it might put a premium on noncooperation and place the conscientious at a competitive disadvantage. Moreover, since moral suasion methods in open market operations necessarily involve elements of selectivity in security transactions, the System in using these techniques ran the risk of having its motives misunderstood and of being accused of capricious discrimination against particular sellers or buyers. For example, such an accusation might arise when the System attempted to avoid transactions involving operations by professional elements in the market of the type that qualified dealers had been requested to avoid.

Now that the Federal Open Market Committee is not following a policy of pegging prices of Government securities, it is the general policy and practice of the System to conduct open market operations solely on an impersonal or objective basis without attempting to influence through personal contact or other methods of moral suasion the market decisions of investors in Government securities.

APPENDIX TO CHAPTER III

Questions Addressed to the Chairman of the Federal Open Market Committee

(To Be Answered in Collaboration With the Vice Chairman)

1. Explain the reasons why the Federal Open Market Committee confines its dealings in United States securities to a small number of "recognized" Government security dealers. Trace the history and explain the mode of operation of this restriction of dealings to recognized dealers.

2. To what extent are open market operations impersonal in character and to what extent are they combined with the instrument of "moral suasion"?

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