

41  
82d Congress }  
1st Session }

41  
JOINT COMMITTEE PRINT

# GENERAL CREDIT CONTROL, DEBT MANAGEMENT, AND ECONOMIC MOBILIZATION

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MATERIALS PREPARED  
FOR THE  
JOINT COMMITTEE ON THE  
ECONOMIC REPORT  
BY THE  
COMMITTEE STAFF



Printed for the use of the Joint Committee on the Economic Report

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UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1951

78276

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JOINT COMMITTEE ON THE ECONOMIC REPORT  
(Created pursuant to sec. 5 (a) of Public Law 304, 79th Cong.)

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## LETTERS OF TRANSMITTAL

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JANUARY 24, 1951.

*To Members of the Joint Committee on the Economic Report:*

At the suggestion of Congressman Wright Patman and Senator Ralph E. Flanders the committee staff was directed to make a study of general credit controls, debt management, and economic mobilization. Dr. William H. Moore was in charge of the study. Other members of the committee staff have subjected it to close scrutiny.

It assembles and gives a purely factual review of available materials bearing on credit and debt management in recent months. It is now submitted to members of the committee for consideration and such suggestions as they may wish to make.

JOSEPH C. O'MAHONEY,  
*Chairman, Joint Committee on the Economic Report.*

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JANUARY 24, 1951.

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

DEAR SENATOR O'MAHONEY: In obedience to instructions from the committee, the staff has assembled and presents herewith basic facts concerning recent changes in short-term interest rates and their effects upon business borrowing, commercial credit, cost of Government borrowing, debt management, and inflation. An exhaustive documentation is included of economic changes that occurred during and after the small rise in interest rates on short-term funds brought about in August and September of 1950.

The materials in this study give new information bearing on both sides of a question which has given rise to a good deal of debate. On January 12, 1951, there was transmitted to this committee a statement (reproduced in full in appendix H) representing the consensus of more than 400 economists (likewise listed in appendix H). As they see the situation:

Large expenditures on military programs and foreign aid, with their inflationary impact, may be needed for a decade or more. Faced with this long-run inflationary prospect, we recommend that the increase in total spending be continuously curbed in three principal ways, and that these constitute the first line of defense against inflation:

1. Scrutinize carefully all Government expenditures and postpone or eliminate those that are not urgent and essential. \* \* \*
2. Raise tax revenues even faster than defense spending grows so as to achieve and maintain a cash surplus. Merely to balance the budget is not enough. If the inflationary pressure is to be removed, taxes must take out of private money incomes not only as much as Government spending contributes to them but also a part of the increase of private incomes resulting from increased private spending of idle balances and newly borrowed money. \* \* \*
3. Restrict the amount of credit available to businesses and individuals for purposes not essential to the defense program. \* \* \*

Selective controls over consumer credit, real estate credit, and loans on securities are useful for this purpose and should be employed. But we believe that general

restriction of the total supply of credit is also necessary. This can be accomplished only by measures that will involve some rise of interest rates.

If general inflationary pressure is not removed by fiscal and credit measures, we face two alternatives: (1) Continued price inflation, or (2) a harness of direct controls over the entire economy which, even if successful in holding down prices and wages for a while, would build up a huge inflationary potential in the form of idle cash balances, Government bonds, and other additions to liquidity. Such accumulated savings would undermine the effectiveness of direct controls and produce open inflation when the direct controls are lifted. \* \* \* Either of these alternatives is extremely dangerous. A prolonged decline in the purchasing power of the dollar would undermine the very foundations of our society, and an ever-spreading system of direct controls could jeopardize our system of free enterprise and free collective bargaining. \* \* \*

In sum, fiscal and credit measures are the only adequate primary defense against inflation, and can minimize the extent of direct Government controls over wages, prices, production, and distribution. \* \* \*

Somewhat in contrast to this point of view is that given classic expression by the Secretary of the Treasury on January 18, 1951. In a speech (reproduced in part in appendix D, item 1) delivered before a meeting of the New York Board of Trade, the Secretary stated:

The Treasury is convinced that there is no tangible evidence that a policy of credit rationing by means of small increases in the interest rates on Government borrowed funds has had a real or genuine effect in cutting down the volume of private borrowing and in retarding inflationary pressures. The delusion that fractional changes in interest rates can be effective in fighting inflation must be dispelled from our minds.

The 2½ percent rate of interest on long-term Government securities is an integral part of the financial structure of our country. \* \* \* It dominates the bond markets—Government, corporate, and municipal. \* \* \*

Any increase in the 2½-percent rate would, I am firmly convinced, seriously upset the existing security markets—Government, corporate, and municipal.

We have not hesitated to draft our youths for service on the battlefield regardless of the personal sacrifice that might be entailed. Neither can we hesitate to marshal the financial resources of this country to the support of the mobilization program on a basis that might, in some instances, require a degree of profit sacrifices.

The materials herewith presented supplement and expand, in the light of current developments, information made available in 1950 by our Subcommittee on Monetary, Credit and Fiscal Policies under the chairmanship of Senator Paul H. Douglas.

The first draft of this report was reviewed by the staff of the Board of Governors of the Federal Reserve System, the staff of the Treasury Department, and by the members of the President's Council of Economic Advisers. They made many helpful suggestions and supplied additional materials, chief among which is the catalog included as appendix I of Treasury-central bank relationships in foreign countries—procedures and techniques. It was prepared by the staff of the Board of Governors of the Federal Reserve System. Included are letters received from the General Counsel of the Treasury (as appendix D) and the Council of Economic Advisers (as appendixes E and F). The views of various economic technicians are compiled in appendix H.

The preparation of this study owes much to the able secretarial services of Mrs. Margaret Miller and Mrs. Eleanor F. Rabbitt and the statistical assistance of Mrs. Marian T. Tracy. Dr. William H. Moore was the economist in charge.

Sincerely yours,

THEODORE J. KREPS,  
Staff Director.

## I. INTRODUCTION

If free democracies are to win the present struggle, they must be strong. They must develop an ever-increasing economic and industrial potential. Maximum use must be made of every scrap of know-how and of material resources. The capabilities of every individual must be developed and utilized to the full.

One of the most important elements making for economic strength is maintenance of confidence in the value of the dollar. Inflation, that is, a steady depreciation in the value of the dollar, is the main enemy within the gates. If allowed to run its course, it in every instance brings unrest and has in some instances paved the way for communism. China and Czarist Russia are but recent examples. Military measures on the fighting front are bound to fail if not matched by vigorous anti-inflationary measures on the home front.

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, 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.

In order to see what new light might be cast upon these difficult problems by recent events, the joint committee seeks at all times to get the fullest possible measure of facts as they become known. The rise of short-term interest rates in the third quarter of 1950 seemed to warrant searching examination and has accordingly been extensively studied in this assembly of materials.

## II. RECENT MONETARY AND FISCAL ACTION

Over the week end of August 18, 1950, decisions announced almost simultaneously by the Federal Reserve and the Treasury were promptly labeled by newspaper headlines as a "squabble," "row," or "clash." Many editorials spoke of conflicting objectives and conflicting responsibilities. In some instances, the area and extent of differences were doubtless overdramatized.

What was ignored or underemphasized was the long record of successful cooperation between the two agencies in the past. This is not to say that there have been no differences between them, both with respect to basic philosophy and current policy. There have been. But they did not come into being over a particular week end. They have been given widespread discussion for over a decade. By questionnaire and hearings, a subcommittee of the Joint Committee on the Economic Report considered that matter some months ago.<sup>1</sup> The

<sup>1</sup> Hearings on Federal Expenditure and Revenue Policies, September 23, 1949, Containing National Planning Association Reports prepared by Conference of University Economists, 81st Cong., 1st sess.

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) S. Doc. No. 132, 81st Cong., 2d sess.

Hearings on monetary, credit, and fiscal policies (September 23, November 16, 17, 18, 22, 23, and December 1, 2, 3, 5, 7, 1949), 81st Cong., 1st sess.

Monetary, Credit, and Fiscal Policies (Report of the Subcommittee on Monetary, Credit, and Fiscal Policies) S. Doc. 129, 81st Cong., 2d sess.

joint committee likewise considered the problem in its annual report and heard the views of the Council of Economic Advisers.<sup>2</sup> From these past discussions and investigations, in fact in the examination of the recent money market happenings in almost every major country in the world, two things can be taken as beyond question: First, that ideal debt-management policy and proper management of monetary controls are both important and difficult to achieve; second, that coordination, especially when requiring administrative articulation of the performance of two or more agencies both conscientiously carrying out their public duties, is bound at times to be something less than perfect.

STATEMENTS BY THE FEDERAL RESERVE SYSTEM AND THE SECRETARY  
OF THE TREASURY

Effective August 21, 1950, the Board of Governors and the Federal Open Market Committee of the Federal Reserve System approved an increase from  $1\frac{1}{2}$  to  $1\frac{3}{4}$  percent in the discount rate at the Federal Reserve Bank of New York.

On the same day the Secretary of the Treasury invited holders of \$7.2 billions of certificates and bonds maturing on September 15 and \$6.2 billions of certificates maturing on October 1 to accept in exchange for them  $1\frac{1}{4}$  percent 13-month notes. These exchange terms were the same as those which the Treasury had offered in exchange for obligations maturing a few months before on June 1 and July 1. It was obvious from their terms that the new notes were not being offered on any premise that tighter money conditions might or should prevail at all soon. The  $1\frac{1}{4}$  interest rate could hardly be competitively attractive marketwise if higher short-term rates, which seemed to be inherent in the announced program of the Federal Reserve System, could actually be expected.

The change in the discount rate by the Reserve authorities was immediately recognized as more a symbol than an effective instrument of control in itself. While the rediscount rate was once a traditional instrument by which central banks undertook to influence credit conditions, a number of factors have pushed its importance into the background in recent years. Member banks, always reluctant debtors at the Federal Reserve banks, today prefer the easy practice of adjusting their reserves by buying or selling Government securities, a practice which has developed in recent years as a result of the growth in the volume of Government securities held by banks. If reserves seem excessively beyond prescribed or traditional minimums, a member bank simply buys Governments for whatever interest they yield. If, on the other hand, private lending opportunities seem attractive or reserve balances have been drawn down below customary levels, added reserves are obtained, not by borrowing but by selling Governments from the member's portfolio. As long as funds can be obtained more cheaply this way than by borrowing, banks need not and will not borrow at the Federal Reserve.

Effectiveness of the discount rate as a monetary instrument depends largely upon the initiative of the members in borrowing or not bor-

<sup>2</sup> Hearings before the Joint Committee on the Economic Report, January 1950 Economic Report of the President (January 17, 18, 19, 20, 1950) 81st Cong., 2d sess.

Joint Economic Report (Report of the Joint Committee on the Economic Report on the January 1950 Economic Report of the President), S. Rep. No. 1843, 81st Cong., 2d sess.; June 1950.



rowing. Open-market operations, as originally conducted, were at the initiative of the monetary authority and were for the purpose of making the discount rate effective. On its own initiative the Federal Reserve System could sell Governments to blot up reserves and buy Governments to ease reserve positions. When, as in recent years, the practice followed by the System calls for buying or selling Government securities at relatively fixed prices, the initiative has come to rest primarily in hands outside the monetary authority. Open-market operations cannot force a pattern of behavior but must rely for their effectiveness on inducing and stimulating member banks and other investors to buy or sell Government securities in response to price incentives.

The significant thing about the announced change in discount rate was, therefore, the accompanying statement by the Reserve System:

\* \* \* 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 implications of this statement were promptly accepted by the financial community as going far beyond that suggested by the mere change in the little-used rediscount rate.<sup>3</sup> In the face of a small volume of discounts, effect of the rate change on the cost of reserves was inevitably slight and its significance not seriously restrictive. What was important was the evidence of a determination on the part of the Reserve System authorities that they intended to fulfill the traditional responsibilities of a central bank in the face of strong inflationary pressures by curtailing access to reserves and restricting credit expansion. The tool chest available to the System by way of moral suasion, open-market operations, and, within statutory limits, changes in reserve requirements, is well enough known to give meaning to a statement that the System intended to make full use of it.

It is important that the action of the Board be recognized and accepted as an attempt to influence the reserve positions of member banks. It would not be proper to view it as prompted by a desire for higher interest rates in and of themselves. Believing that restraint was desirable in the expansion of bank credit, the System authorities were forced to accept higher interest rates not so much as a necessary tool but as the inevitable result if restrictive measures of a broad, general character were to be employed at all.

The philosophy underlying the action is similar to that favored by the Monetary, Credit, and Fiscal Policies Subcommittee of the Joint Committee on the Economic Report, when it said:

\* \* \* As a long-run matter, we favor interest rates as low as they can be without inducing inflation, for low interest rates stimulate capital investment. But, we believe that the advantages of avoiding inflation are so great and that a restrictive monetary policy can contribute so much to this end that the freedom of the Federal Reserve to restrict credit and raise interest rates for general stabilization purposes should be restored even if the cost should prove to be a significant increase in service charges on the Federal debt and a greater inconvenience to the Treasury in its sale of securities for new financing and refunding purposes.<sup>4</sup>

<sup>3</sup> See Appendix B.

<sup>4</sup> S. Doc. 129, 81st Cong., 2d sess., January 23, 1950, p. 2.

On the Treasury side the announcement of the refunding program in terms which could only suggest continuance of established policies rather than a shift of policy in the direction of restriction was followed immediately by a further statement emphasizing the importance of debt management in the maintenance of a stable and confident situation in the market for Federal securities. This the Secretary declared is "our first line of defense on the financial front."

The Board of Governors also urged, in addition to higher taxes, restraint on "further expansion of bank credit, consistent with the policy of maintaining orderly conditions in the Government securities market," which, it stated, was needed "to support the Government's decision to rely in major degree for the immediate future upon fiscal and credit measures to curb inflation."

The philosophy behind the Treasury policy was well summarized by the Monetary, Credit, and Fiscal Policies Subcommittee. After hearing representatives of both agencies the subcommittee made the following statement:

Treasury and Federal Reserve officials have advanced a number of reasons for the policy of holding down the yields and supporting the prices of Governments in the face of inflation. (1) Such a policy holds down service charges on the Federal debt. \* \* \* (2) The maintenance of relatively stable prices on Governments helps to maintain confidence in the public credit and facilitates Treasury sales of securities for both new financing and refunding purposes. \* \* \* (3) The maintenance of stable security prices protects investors against capital depreciation and prevents any loss of public confidence in financial institutions, including banks, that might result from a serious decline of these prices. (4) Any marked decline in the price of Governments would be communicated to other parts of the credit market and might bring about unemployment and deflation by interfering with the flotation of new securities. \* \* \* (5) Any feasible rise of the yields on Governments would be so ineffective as an anti-inflationary measure as not to be worth its cost. \* \* \*

Both points of view have their supporters, both inside and outside the Government, among economists, and among businessmen. The top economic agency in the Federal Government, the Council of Economic Advisers, after citing the summary given above, concluded:

\* \* \* We think these reasons are valid and so cogent that they require that debt-management policy must be dominant and that we must look for other ways to restrain dangerous inflation rather than subordinate the debt-management policy to traditional central bank operations.<sup>5</sup>

### III. MARKET EFFECT OF THE AUGUST ANNOUNCEMENTS

With this brief survey of the formal statements issued by the two agencies and of the philosophy behind each of them, we turn to an examination of their effect on governmental and private credit as reflected in the money market.

#### ACCEPTANCE ACCORDED TO THE EXCHANGE OFFER

Since the immediate problem arose from the necessity for refunding callable and maturing Treasury issues, the acceptance given to the exchange offer is an important measure of its success. The actual results are summarized and compared with the results of the two previous refunding operations in table 1. The first of these operations may be considered as a success in that most of the maturing securities

<sup>5</sup> S. Doc. 129, op. cit., p. 26.

<sup>6</sup> Hearings, January 1950 Economic Report of the President, op. cit., p. 66.

were exchanged without Federal Reserve support; the second showed a high proportion of total exchanges but required Federal Reserve support; while the last offering presented a much different picture.

Of the more than \$13.5 billion of called and maturing issues in September and October, only \$800 million, or less than 6 percent, were exchanged by holders other than the Federal Reserve and \$2.4 billion, or 17 percent, were redeemed for cash. Holders of 59 percent of the issues sold them to the Federal Reserve. Essentially the same type of 1½ percent notes had been offered in exchange for June and July maturities. About 17 percent of the holders of the then maturing issues decided not to accept the Treasury's exchange offer, with 13 percent selling to the Federal Reserve and 4 percent taking cash payment. The change in the attractiveness of the exchange offering in a few months was, of course, purely a matter of pricing and appropriateness of the new issue to new market conditions. The holders of issues maturing or called for repayment had preferred to reinvest the proceeds in issues other than the new 1½ percent notes since they could do better interestwise by buying in the open market rather than accepting the Treasury's exchange terms. The unexchanged proportion amounting to \$2.4 billion was paid off by the Treasury out of general fund cash augmented as it was at the time by quarterly tax collections.

TABLE 1.—Redemption experience in refundings, selected dates, 1950

[Amounts in millions of dollars]

	Refunding		
	March and April 1950	June and July 1950	September and October 1950
<b>ISSUES BEING RETIRED</b>			
Total outstanding.....	9,444	10,620	13,570
Federal Reserve holdings:			
At time of announcement.....	1,040	2,812	2,370
Purchased after announcement.....	0	1,384	8,030
Exchanged:			
By Federal Reserve.....	1,040	2,496	10,400
By others.....	7,954	5,973	794
Redeemed for cash.....	450	451	2,376
<b>PERCENTAGES OF TOTAL</b>			
Exchanged by Federal Reserve—total.....	11.0	39.5	76.7
Original holdings.....	11.0	26.5	17.5
Purchased.....	0	13.0	59.2
Exchanged by others.....	84.2	56.2	5.8
Redeemed for cash.....	4.8	4.3	17.5

<sup>1</sup> Includes Federal Reserve purchases through June of the new note issued in exchange for the certificates maturing June 1, 1950.

<sup>2</sup> Purchases by the Federal Reserve during June of the new notes issued on June 1, 1950, are considered as exchanged by the Federal Reserve.

Source: Board of Governors of the Federal Reserve System.

#### PART PLAYED BY FEDERAL RESERVE SYSTEM IN REFUNDING

By the time of the exchange the overwhelming bulk of the maturing issues offered to the Treasury for exchange into the new 1½ percent 13-months issue was held by the Federal Reserve banks. The System purchased the called and maturing issues at par or higher and offered them in exchange for the new 1½ percent notes, thus keeping

cash redemptions within limits easily manageable from the standpoint of Treasury cash and current receipts. The Reserve banks, while acquiring maturing issues at a rate which gave them over \$10 billion out of the \$13½ billion maturing, were able to maintain at the same time some degree of control over member bank reserves by selling other issues at higher yields and by allowing bills to run off without replacement. The risk taken was that System purchases would exceed sales with a result precisely contrary to that intended—namely, increasing member bank reserves rather than operating to restrict them.

A glance at tables 1 and 2 is sufficient to show the magnitude of these transactions. In the weeks between the announcement of the new 1¼ notes and the expiration of the exchange offer, the System purchased nearly \$8 billion of the new issues, but sold nearly \$7 billion of these and other securities on balance (table 2).

TABLE 2.—*Distribution of United States Government securities held by Federal Reserve Banks*

[In millions of dollars]

Issues	June 21, 1950	Aug. 16, 1950	Oct. 11, 1950	Increase or decrease	
				June 21* to Aug. 16	Aug. 16 to Oct. 11
Retired on:					
Sept. 15, 1950.....	704	704	1 5, 181		+4, 477
Oct. 1, 1950.....	1, 481	1, 666	1 4, 832	+185	+3, 166
Total.....	2, 185	2, 370	1 10, 013	+185	+7, 643
Other securities:					
Bills.....	3, 983	4, 271	1, 347	+288	-2, 924
Certificates.....	3, 175	1, 157	73	-2, 048	-1, 054
Notes.....	3, 149	6, 338	4, 151	+3, 189	-2, 187
Bonds.....	5, 187	4, 228	3, 922	-959	-306
Total.....	17, 679	18, 334	19, 507	+655	+1, 173

\* Holdings of new notes obtained in exchange for issue maturing on dates indicated. The total figure differs from the total amount exchanged shown in table 1, because of sales between time of exchange and Oct. 11.

Source: Board of Governors of the Federal Reserve System.

#### EFFECT ON MEMBER BANK RESERVES

The System managed to keep the net addition to reserve bank credit in the period from August 16 to October 11 to a figure just under \$1.2 billion. Several other sizable changes in the factors supplying and using member bank reserves during this 8-week period, as is shown in table 3, reduced the effect on reserves of these net purchases. Most important of these were an outward flow of gold of \$522 million and an increase in currency in circulation of about \$363 million both of which absorbed reserves. On balance, member bank reserves were increased over the period by nearly \$500 million, about equally divided between excess reserves and reserves required to support the increase in bank deposits which occurred.

#### EFFECT ON SHORT-TERM RATES OF INTEREST

Accompanying these shifts of Government security holdings between the Reserve System, the commercial banks, and other nonbank holders

were changes in the market price—that is, the yield—of the short-term issues. The course of certain money rates in recent weeks is given in appendix A, table 1. To date changes in the rates on longer-term Governments and in corporate bonds have been slight. The upward turn in short-term rates after August 18 reflects the market reaction to the increase in the rediscount rate and the open market operations of the System.<sup>7</sup>

TABLE 3.—Member bank reserve balances and related items, June 21, Aug. 16, and Oct. 11, 1950, with changes

[In millions of dollars]

	June 21, 1950	Aug. 16, 1950	Oct. 11, 1950	Increase or decrease	
				June 21, to Aug. 16	Aug. 16, to Oct. 11
<b>Factors supplying reserves:</b>					
Reserve bank credit:					
Government securities.....	17,679	18,334	19,507	655	1,173
Bonds.....	5,650	4,691	3,922	-959	-769
Bills, certificates, and notes.....	12,029	13,643	15,585	1,614	1,942
Discounts and advances.....	74	106	70	32	-36
All other (including transit items).....	508	449	469	-59	19
Reserve bank credit outstanding.....	18,261	18,889	20,044	628	1,155
Gold stock.....	24,231	23,954	23,432	-277	-522
Treasury currency.....	4,605	4,608	4,618	3	10
Total supply.....	47,097	47,451	48,094	354	643
<b>Factors using reserves:</b>					
Money in circulation.....	26,926	26,976	27,339	50	363
Treasury cash.....	1,294	1,309	1,316	15	7
Treasury deposits with Federal Reserve.....	529	717	508	188	-209
Nonmember deposits and other accounts.....	2,179	2,151	2,142	-28	-9
Member bank reserves.....	16,169	16,298	16,789	129	491
Required.....	15,522	<sup>1</sup> 15,559	15,809	37	250
Excess.....	647	<sup>1</sup> 739	<sup>1</sup> 980	92	241
Total uses.....	47,097	47,451	48,094	354	643

<sup>1</sup> Preliminary.

Source: Board of Governors of the Federal Reserve System.

For the first time since 1931 a new Government security was traded in the market below par immediately upon issuance when the new 1¼ percent notes were traded on a 1.34 percent basis. By exchange of the maturing issues the Reserve System had become far and away the principal holder of the new 1¼ percent certificates. Anxious to blot up member reserves by selling Government holdings to them, the System authorities made the price concessions which were reflected in the higher yield rate on all short-term Government securities.

While these things were happening in the Government security market, the expected rise in rates on private credit was working itself out. Some banks marked up the rates charged their customers. Just 5 weeks after the announcement by the Reserve authorities of their intention to work for restraint in bank credit came the brief announcement of a leading central Reserve city member:

The National City Bank of New York announced today that effective Friday, September 22, its prime rate to commercial borrowers has been increased to 2¼ percent per annum.

<sup>1</sup> For day-to-day changes in rates on selected Government issues, see charts 1, 2, 3, and 4, appendix D.

The rate on loans to concerns with highest credit rating had been 2 percent. The following table shows the upward revision in other quoted rates in the sensitive New York market:

	August 18	October 11
90-day bankers' acceptances.....	1 $\frac{3}{4}$	1 $\frac{3}{4}$
4 to 6 months' prime commercial paper.....	1 $\frac{1}{4}$	1 $\frac{3}{4}$
Call loans.....	1 $\frac{1}{2}$	1 $\frac{3}{4}$

The impact of a rise in short-term Government rates on conventional rates charged borrowers outside the money centers is less easy to measure. It is almost certain to take longer to work itself out, if, indeed, it does at all.

#### CHANGES IN VOLUME OF BANK LOANS OUTSTANDING

The objective of all these shifts and churnings, it must be repeated, was not higher interest rates for themselves. The real aim was a dampening of the enthusiasm on the part of lending banks, and to some degree of borrowers, for new private loans which would add fuel to the inflationary pressures. Time is often needed for any monetary or control program to work itself out. Some would contend that the time since August 18 has not been long enough to influence the volume of credit outstanding. On the other hand, those who would defend monetary medicine as quick acting will find little comfort in the fact that loan accounts kept rising persistently after the announcement of the System's restrictive policy. Appendix A, table 2, shows weekly changes since June 21 in the aggregate volume of principal loan categories.

In its August 18 statement, the Federal Reserve System had pointed out that during the preceding 6 weeks, loans and holdings of corporate and municipal securities by banks in leading cities had expanded 1 $\frac{1}{2}$  billion to a total of 33 billion. Since loans to brokers had fallen by some 300 million, the increase in nonstock market loans to business was even higher. So far as its statement was concerned, the reference to the increase in loans and holdings of corporate and municipal securities was the only item which the Board felt it necessary to note specifically in its statement in order to justify its action. "Such an expansion under present conditions," the Board stated, "is clearly excessive." The rate of expansion, however, continued undiminished in the weeks that followed.

The total loans and holdings of corporate and municipal securities by banks in leading cities increased \$5,000,000,000 between June 21 and November 15. The increase has been continuous by weeks; about \$2,000,000,000 of it fell in the 8-week period between the Korean attack and the announcement of the System's desire to restrict further expansion; an additional \$3,000,000,000 increase has occurred in the 13 weeks between August 16 and November 15. Commercial, industrial and agricultural loans have shown increases each week, rising to \$16,000,000,000 in the first week of October as compared with 13.5 billion in the spring of 1950. A similar expansion has taken place in real estate and other loans which have advanced consistently

to a total of 11 billion on October 4. As table 2, appendix A, shows, the increases have occurred not only in the New York financial center, but in the leading cities outside of New York.

#### EXCHANGE OFFERING MADE IN NOVEMBER

The management of the public debt requires at intervals the refunding or paying off of issues as they mature or become callable. The maturity schedule recently of publicly held securities is shown in appendix A, table 3. Each operation will have to be handled as an individual case. The type and terms of offering will in each instance have to be carefully judged in the light of market conditions and needs at the particular time. On the occasion of the September-October refunding, opinions outside the Treasury Department differed concerning the most appropriate type and pricing of a security to be offered. Such differences were dramatized by the incident which began August 18. They are almost certain to reappear at intervals as new refundings are necessary.

In December 1950 and January 1951 securities aggregating more than \$8,000,000,000 mature. The Secretary of the Treasury announced on November 22 that owners of the maturing issues would be offered a 1½ percent 5-year Treasury note in exchange. Financial experts seem generally agreed that the type and rate on the new offering were not only in accord with market conditions but highly appropriate in view (1) of the heavy maturities of 1951, (2) the desirability of intermediate or longer-time financing at this time, and (3) the desirability at this time particularly of an offering of assured attractiveness. A few nonfinancial corporations and some other nonbanking investors were reported to favor a somewhat shorter term. Others were said to prefer an issue of about 7 years' maturity.

#### IV. ROLE OF GOVERNMENT DEBT IN MONETARY POLICY

For many years the coordination of policies of central banks and treasuries was not a serious problem. Central banks were generally restricted by statute or tradition with respect to their dealings in Government securities, primarily because of unfortunate results of excessive reliance by treasuries on central bank credit. Central bank operations were largely confined to dealings in commercial paper and rediscounts; monetary policies were governed by traditional rules of the gold standard.

In recent years, however, the basic relationships between central banks and treasuries have undergone fundamental changes. On the one hand the techniques of central bank management have become increasingly recognized as less automatic and much more dependent upon the judgment of the responsible authorities than was formerly believed, especially in the days of the gold standard. More importantly, the tremendous increase in the volume of public debt during the war has had the effect of increasing the importance of governmental treasuries in matters influencing the supply of money and the volume of credit.

## OWNERSHIP OF THE GOVERNMENT DEBT

The Treasury, faced with the necessity of raising large sums of money during the period of war finance, had to sell large quantities of securities to the commercial banks and must continue to refund a portion of maturing issues through the banks. Commercial banks, therefore, now hold large amounts of Government securities. So long as the price convertibility of these securities is maintained, they can readily be turned into reserves, which provide the basis for a further multiple credit expansion. Purchases by the Federal Reserve from other holders may also add to the supply of bank reserves. Estimated distribution of ownership of interest-bearing Federal securities held by the public is shown in table 4.

TABLE 4.—Ownership of interest-bearing U. S. Government securities held by the public June 30<sup>1</sup>

[In billions of dollars]

	1945	1947	1950	1945	1947	1950
<b>Nonbank investors:</b>				<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Individuals.....	58.5	66.1	69.7	25.2	29.7	32.1
Insurance companies.....	22.7	25.0	20.1	9.8	11.2	9.2
Mutual savings banks.....	9.6	12.1	11.6	4.1	5.4	5.3
Other corporations and associations.....	29.8	20.1	23.8	12.8	9.0	10.9
State and local governments.....	5.3	7.1	8.2	2.3	3.2	3.8
<b>Total.....</b>	<b>125.9</b>	<b>130.5</b>	<b>133.4</b>	<b>54.3</b>	<b>58.6</b>	<b>61.3</b>
<b>Banks:</b>						
Commercial.....	84.2	70.0	65.7	36.3	31.5	30.2
Federal Reserve.....	21.8	21.9	18.3	9.4	9.8	8.4
<b>Total.....</b>	<b>106.0</b>	<b>91.9</b>	<b>84.0</b>	<b>45.7</b>	<b>41.3</b>	<b>38.6</b>
<b>Total held by the public<sup>1</sup>.....</b>	<b>231.9</b>	<b>222.4</b>	<b>217.4</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<sup>1</sup> Excludes holdings of Federal Government agencies and trust funds.

Source: Annual Reports of Secretary of Treasury and Treasury Bulletins.

Considerable progress has been made since the war toward placing a larger portion of the debt in the hands of nonbank investors. The total debt held by the public—that is, outside Federal Government investment accounts—has been reduced in the 5 years ending June 30, 1950, by 14.5 billion dollars. Portfolios of commercial banks and Federal Reserve banks have declined 20 billion dollars, while holdings of nonbank investors have increased 7.5 billion. Thus commercial bank ownership of Government debt held by the public has been cut from over 36 percent in 1945 to less than 30 percent in 1950. The amount of savings bonds outstanding has expanded throughout the postwar period, and the portion of the total debt held by individuals has increased by 11 billion dollars, to nearly 70 billion dollars, or one-fifth more than in 1945. Other investors which have increased their holdings over this period are State and local governments and mutual savings banks, whose holdings rose by 3 billion and 2 billion dollars, respectively. Corporations and associations and insurance companies reduced their holdings, in part to finance postwar capital expansion.



## HEAVY MATURITIES IN THE NEAR FUTURE

When the public debt is of such a size that its long shadow is cast over all credit arrangements, so that its management becomes a major factor in the maintenance of economic stability, its due dates as well as ownership and cost assume utmost importance. Appendix A, table 3, summarizes the maturity schedule facing the United States Government on its interest-bearing public marketable securities. A glance at the list of early maturities shows better than any data on interest rates or cost data why the Treasury is concerned about the maintenance of "a stable and confident situation in the market."

The Treasury faces the task of refunding 32.3 billion dollars of publicly held issues maturing in the calendar year 1951. This does not include 13 billion of 91-day Treasury bills that are ordinarily rolled over every 3 months. In addition, nearly 12 billion of bonds with relatively high coupon rates become callable. Whether these are refunded at their earliest call date will, of course, depend upon market conditions at the time. If they are called, as now seems probable, the refunding task for 1951 will involve more than 44 billion dollars, nearly one-third of the total marketable debt exclusive of bills.

When and how much more the Treasury may have to raise by new borrowing is unknown. With defense expenditures increasing rapidly only a courageous tax policy can save the Treasury from the necessity of large new issues. Thus, in addition to the enormous refunding task in forthcoming months there is the probability that the Treasury may have to raise several billions in net new money.

In the face of the ever-present need to keep the credit of the Government on a solid foundation, the Treasury must strive for three objectives: (1) To place as large a part of the debt as practicable in nonbank hands, (2) to fund as much as possible into longer-term maturities, (3) to manage the debt at minimum cost to the Government.

The last point is so apparent that it often becomes the dominant consideration. Obviously, the cost of carrying the debt might be made even lower than it is today, by tipping the scale of maturities more and more toward lower-rate short-term bills and certificates. There is no one "right" apportionment of debt by maturities or between short- and long-term issues. In the past 3 or 4 years there has been a tendency toward increasing concentration of the marketable debt in the shorter maturities. As the first part of table 5 shows, the amount of marketable debt outstanding has been reduced 34 billion dollars since mid-1946 while the amount maturing in over 5 years declined by 31 billion. As may be seen from the second part of table 5, the proportion of marketable debt due or callable in under 3 years has increased from a midyear low of 38 percent in June 1947 to 52 percent in mid-1950. The average maturity of the marketable debt has dropped from about 7½ years in June 1947 to slightly over 6 years at the present time. The present level, however, approximates the levels of 1943-44.

## 12 CREDIT AND DEBT CONTROL AND ECONOMIC MOBILIZATION

TABLE 5.—*Marketable public debt outstanding by period to due or first call date, June 30, 1946-50*

[In billions of dollars]

June 30	Due or callable—					Total
	Within 1 year	1-3 years	3-5 years	5-10 years	After 10 years	
1946.....	62.1	17.0	18.0	32.8	59.7	189.6
1947.....	52.4	13.4	29.1	18.9	54.8	168.7
1948.....	49.9	18.0	28.1	10.5	53.9	160.4
1949.....	52.3	29.1	10.1	15.1	48.6	155.2
1950.....	42.4	38.5	13.3	15.9	45.2	155.3
	PERCENTAGE OF TOTAL					
1946.....	32.8	9.0	9.5	17.3	31.4	100.0
1947.....	31.1	7.9	17.3	11.2	32.5	100.0
1948.....	31.1	11.2	17.5	6.6	33.6	100.0
1949.....	33.7	18.8	6.5	9.7	31.3	100.0
1950.....	27.3	24.8	8.6	10.2	29.1	100.0

Computed from Treasury Bulletin tables.

### INTEREST ON THE PUBLIC DEBT

The sheer size of the debt is important. The inertia of such a mass of debt can hardly be ignored as a determinant of economic stabilization or mobilization. But, the burden of the national debt ought not only to be measured by the principal amount—now about 257 billion dollars—but also by its annual carrying charge in relation to current income. Appendix A, table 4, compares the actual annual expenditures for interest on the public debt with the national income. Since World War II, interest has been equivalent to some 2.5 percent of national income compared with an average of 1.3 percent during the 1930's. Though such an increase is considerable, it is always well to remember that the relative burden of a given debt may be cut not only (1) by paring the interest cost through debt retirement or otherwise, but, (2) even more effectively, by the growth of national income.

Another relationship throwing light upon the burden of the debt is the burden of taxes levied to meet the annual interest charge. Appendix A, table 4, shows also the portion of Federal budget receipts necessary to pay interest on the Federal outstanding debt. There are those who contend that the taxes and interest charges on an internally held debt are of little moment because they represent merely transfer payments. While it is true that a debt "owed to ourselves" is not to be measured as are the debts of individual debtors, one cannot regard lateral transfers of income from one group of the population to another to be without effect or significance. Taxes constitute eventually not only offsets but deterrents.

In postwar years about one-eighth of all Federal receipts have gone for the payment of interest. The percentage is, of course, greatly affected by the enormously increased expenditures for other governmental purposes. That is why it is no higher than and in most cases is well below that for any peacetime year since before World War I.

Interest payments on the public debt for 1950 and 1951 of nearly \$5,700,000,000 each year are approximately \$1,000,000,000 higher than interest payments were in 1946. These increased interest charges

added to total Government expenditures are part of the total outlays which ultimately taxpayers will have to meet. They occurred in spite of a substantial reduction in the amount outstanding. During the fiscal year 1946, the Government debt reached a peak of \$280,000,000,000, from which it has been reduced by nearly 10 percent, principally through the application of Treasury cash.

There are several explanations for the increased annual charge. The \$1,000,000,000 increase in interest cost since the fiscal year 1946, when the debt was at its peak, is largely due to higher interest paid or accruing on savings bonds. Series E and F savings bonds earn little interest in the early part of their term. But as the maturity date approaches interest accumulates at an increasing rate. About \$500,000,000 more interest was accrued on these issues in the fiscal year 1950 than in fiscal 1946. An increase in the outstanding amount of series G savings bonds during this period also accounted for a rise of \$200,000,000 in interest cost, while interest on the growing amount of special issues held by Treasury investment funds accounted for an additional \$300,000,000.

Interest paid on marketable Treasury bonds showed little change. Market short-term interest rates increased during this period, however, with the average computed rate on Treasury bills rising from 0.381 percent in 1946 to 1.187 percent in 1950, and on Treasury certificates rising from 0.875 percent to about 1.20 percent. These changes alone on amounts presently outstanding added about \$160,000,000 to the gross annual cost which taxpayers must pay in support of the Government debt. The effect on the over-all interest cost of the marketable debt was partially offset by the retirement of high-coupon maturing issues and a reduction in the total amount of marketable securities outstanding.

#### COST OF A GIVEN RISE IN INTEREST RATES

Figures on the cost to the Treasury of a given rise in the interest rate on some particular type of security are not entirely easy to measure. In the first place, shifts taking place between types of issues outstanding may result in an actual decrease in the interest cost even though interest rates per unit were rising. Often these shifts arise from purely technical or legal limitations; the difference between a 13-month note and a 12-month certificate, for example, is less important economically than their segregation in statistics and reports suggests.

In addition to the computed average interest rates on each class of security, appendix A, table 5, shows the relative weight in the Government's annual interest bill of short-term issues, nonmarketable issues, and the special issues held by the Government trust funds.

About 15 percent of the annual interest charge on the interest-bearing Federal debt is paid over to Government trust funds (appendix A, table 5, third section). Nearly one-third of the interest cost is attributable to the nonmarketable issues, chiefly series E bonds. Finally, chiefly because rates are low, only about 10 percent of the entire annual cost arises from the marketable securities issued for short terms—bills, certificates, and notes.

A further caution is necessary respecting the significance attached to a given rise in the rate of interest on Government securities as it

relates to the debt-carrying cost of the Government. A considerable part of all interest expenditures is recovered through income taxes paid by the recipients. One should, of course, not press the tax-recovery argument too far; the same sort of net-cost argument might be applied to most types of Government expenditures.

The cost of rising interest rates may be illustrated by examples particularly appropriate to the current inflationary situation. In the 12 months beginning December 1, 1950, the Treasury Department, as we have noted, will be called upon to refund maturing and callable issues aggregating nearly \$60,000,000,000 of maturing issues. If money-market conditions should make it necessary to refund this staggering sum at rates one-eighth percent above rates on the maturing issues, the added interest cost would be \$75,000,000 annually, allowing nothing for tax recovery as an offsetting item.

It may be suggested that if rates rise by one-eighth percent for refunding these early maturities a similar rise will undoubtedly have to be faced for subsequent maturities. The total marketable interest-bearing debt is now about \$155,000,000,000. One-eighth percent on this amount is approximately \$200,000,000. After allowance for tax recovery the net amount will be substantially less. In making calculations based on such an assumption, however, it should be kept in mind that some of the debt has many years to run before refunding is necessary, that some of the issues already have relatively high coupon rates, and that changes in short-term rates might occur without affecting rates of refunding into longer-term issues. Interest rates may show considerable fluctuations in the interim. By the time the refunding must be done rates may be lower again.

Important as added costs by way of interest burden may be, their significance can be seen in proper perspective only by considering other costs of Government and the effect of inflation on these costs. The Congress recently passed a supplemental national defense appropriation of \$16,000,000,000. In connection with it, the Air Forces pointed out to a House Armed Services subcommittee that a rise in costs of 7 to 8 percent more than anticipated had lessened Air Force purchasing power between April and September 1950 by the equivalent of 750 F-86 jet fighter planes. As a result the purchase of 4,400 new planes programed was expected to cost some \$300,000,000 over the original estimates made just a few months previously. No wonder Senator Lyndon Johnson recently warned the Congress "rising prices are making our defense cost calculations empty, tentative guesses."

No wonder the Senate Committee on Appropriations was "profoundly disturbed by the untimely increasing prices of commodities affecting national defense." The committee, in its report, went on to say that analysis of information filed with it by the Secretary of Defense "carries the startling information that inflation has cut the value of the dollars of the sums appropriated for defense since pre-Korea by approximately \$3,000,000,000." Other authorities have pointed out that price rises resulted in substantially offsetting or eating up the increased taxes levied on individuals and corporations by the Revenue Act and the Excess Profits Tax Act of 1950.

In the months since April the purchasing power of the defense-dollar has been cut inestimably. Direct price comparisons can only be made on relatively standard type items but the changes in the

price of representative items are suggestive. The increase in the price of crude rubber between April and December 1950 amounted to 210 percent; fuel oil, west coast, 112 percent; tires 38 percent; beach tractor, 6.4 percent; wire rope, 100 percent; cloth, 40 percent; and manufactured military communication equipment from 20 to as much as 240 percent on some items. A table showing military procurement price trends on selected raw materials and standard items prepared by the Office of the Secretary of Defense is included in appendix A, table 6. Costs to the Government—the largest purchaser of goods and services in the country—have thus risen as much as and in many cases more than costs to housekeepers and citizens.

Suppose by way of illustration that defense or general governmental costs advance as a result of price rises by \$1,000,000,000 over what they would have been had the price rise not occurred. On the supplemental defense appropriation alone, a general rise of all prices averaging only 6½ percent would mean loss of purchasing power of that magnitude.

This billion dollars, like every other dollar that the Government must pay in added costs, is effectively added to the Government debt either by the necessity for increased borrowing or by a diversion of money otherwise available for debt reduction. The added costs are thus frozen into the Government debt for all time. No matter what happens to interest rates the Government must pay interest on those extra dollars until the time when the debt can be repaid. The average rate being paid on the interest-bearing debt today is about 2.2 percent or \$22,000,000 each year on each \$1,000,000,000 of debt.

Rising prices and rising costs of Government add directly to the annual burden of interest on the debt. If one could be sure that moderate credit restriction would stop these rising costs, the resulting rise in interest rates on the debt would be a small or reasonable price to pay. Unfortunately one cannot be sure that it may help to keep prices from rising as much as they would have otherwise. There is, indeed, a responsible body of opinion in the financial and business world contending that no moderate rise in interest rates will halt or retard inflation so long as Federal deficits continue.

#### RESTRAINING EFFECTS OF HIGHER SHORT-TERM RATES

While the increased cost to the Government resulting from a rise in the interest rate on the part of the debt may be calculated more or less precisely, the effectiveness of higher interest rates in dampening inflationary forces is unmeasurable and hidden. Thus, the case for a policy of monetary restraint is likely to suffer in discussion from having to depend on prediction and deduction for its justification. There are no statistical measures by which to answer conclusively such questions as: How effective can action be, such as that taken by the Reserve authorities last August? How is a change in the reserve status of member banks translated into a decrease in inflationary demand?

The policy proposed by the Reserve authorities was intended to tighten up bank reserves by raising their cost to member banks. The increased cost of reserves would result from the higher discount rate and from reduced Reserve System purchases of Government securities

and then only at higher yields. These higher yields, it is argued, not only induce more nonbank investors to buy Government securities but also restrain banks from selling them, for they are unable to do so without incurring some capital losses and a greater sacrifice in terms of yield. But the amount of reserve balances held by member banks is not necessarily the final or most important factor determining the amount which they are willing to lend to their customers. Many influences, other than the rate, are likely to come into play; while not all of these considerations are wholly rational in the strict economic sense, they are still of utmost importance in determining the amount of credit extended.

A tighter reserve policy on the part of the monetary authorities is a signal to members calling for a more cautious attitude in credit expansion. The reaction of the commercial banker to such signs may take the form not only of higher rates charged to customers, but is even more likely to express itself in something akin to actual "rationing" of credit as well. Would-be borrowers may be "chilled" in various bankerlike ways. Loans granted may be pared below the amount sought in the borrowers' applications.

In due time the short-term rate may be expected to influence long-term rates as well. In various ways and places the two rates are in competition with each other. There are some lenders, particularly the banks themselves, that lend in both the long-term and short-term markets. Portfolios are shifted from one to the other maturity, tending to equalize their over-all attractiveness. Borrowers likewise may finance their operations by any one of several possible combinations between long-term and short-term borrowing. This in turn tends to make factors affecting one rate spread their influence to other rates.

Like the bankers, their industrial and commercial customers are not necessarily influenced by every change in interest rates. Cheap money is only one of the factors that encourages private investment. There are many others of greater importance. In fact, a recent study published by the Department of Commerce shows that cost of funds is almost an insignificant item affecting changes in investment plans. The table below adapted from that study shows that in 1949, despite the emphasis given in the financial press to availability and cost of capital, other factors were of immensely greater importance. (See table 6.) It provides the elements of a quantitative answer to the questions raised by the Subcommittee on Investment of the Joint Committee on the Economic Report when it asked:<sup>8</sup>

What is the relative role played (a) by a persistent flow of orders in excess of ability to deliver, (b) by inventions, patents, and improvements in technique, (c) by increases or shifts in the population, (d) by discovery of new sources of supply, (e) by need or desire to get ahead of, or keep abreast of, competitors, (f) by changes in governmental tax, tariff, fiscal, or regulatory policies, (g) by debt-equity ratios or liquidity or ready availability of funds, (h) by interest rates and costs of financing, (i) by cost levels of labor, building materials, and equipment, (j) by prices and market prospects for the industry, (k) by stock-market activity and the general business outlook, and other factors?

<sup>8</sup> Volume and Stability of Private Investment, Report of the Subcommittee on Investment, S. Doc. No. 149, 81st Cong., 2d sess., p. 27.

TABLE 6.—Frequency distribution of explanatory factors for changes in investment plans, 1949<sup>1</sup>

Changes from expectations in—	Percentage of firms designating factor as principal reason for—		Changes from expectations in—	Percentage of firms designating factor as principal reason for—	
	Increased outlays	Decreased outlays		Increased outlays	Decreased outlays
Profit potentials:			Plant and cost factors.—Con.		
Sales outlook.....	10.4	34.1	Current expenses.....	1.7	-----
Competitive conditions.....	6.9	-----	Total.....	39.2	37.8
New products.....	6.4	8	Financial considerations:		
Net earnings after taxes.....	5.2	12.1	Availability and cost of debt financing.....	-----	1.5
Total.....	28.9	47.0	Availability and cost of equity capital.....	1.2	-----
Plant and cost factors:			Total.....	1.2	1.5
Plant and equipment supply situation.....	16.8	9.8	Miscellaneous.		
Plant and equipment costs.....	12.7	3.8	Routine under and over estimate.....	15.6	3.8
Availability of labor and materials.....	-----	4.5	All other.....	15.1	9.9
Working capital requirements.....	1.7	9.1	Total.....	30.7	13.7
Technology.....	4.0	3.0	All factors.....	100.0	100.0
Time lag in placing order or contract.....	2.3	7.6			

<sup>1</sup> 305 manufacturing firms; changes in actual outlays over those anticipated at beginning of year.

Source: Survey of Current Business, December 1950, grouping of items by staff of joint committee.

Mr. R. G. Hawtrey, in his *A Century of Bank Rate*, comments on the connection between the rates of interest and the demand for funds as follows:

Now a variation even of less than one-eighth percent in the long-term rate of interest ought, theoretically and in the long run, to have a definite effect for what it is worth on the volume of capital outlay. That is to say, if the rate of interest operates as a criterion of all projects for capital outlay, separating those which promise a sufficient yield to be remunerative from those which do not, then any rise, however small, in the rate ought to transfer a corresponding slice of projects from the remunerative to the unremunerative class. But there is in reality no close adjustment of prospective yield to the rate of interest. Most of the industrial projects offered for exploitation at any time promise yields ever so far above the rate of interest. But they have to wait till promoters combining the necessary qualifications of technical, commercial and industrial ability and knowledge, with access to money, become available. The limited number of people composing this inner ring of specialized promoters will want to be satisfied that the projects they take up will yield them a commensurate profit, and the rate of interest calculated on money raised will probably be no more than a very moderate deduction from this profit. It is not even true that the most profitable projects are dealt with first. It is a matter of chance which project a promoter will select from the sphere of his competence. It may easily happen that an exceptionally profitable project has to wait a long time, while money is being spent by those qualified to take it up on much less remunerative openings, or even wasted on enterprises that turn out complete failures.

The idea of the possible openings for investment forming a series in order of remunerativeness, so that all promising a yield in excess of the rate of interest prevailing at the moment have already been filled, and a fall in the rate will bring into exploitation a nicely calculated segment of the remainder, as a slice is cut off a sausage, is an academic fiction \* \* \*

<sup>1</sup> Hawtrey, R. G., *A Century of Bank Rate*, Longmans, Green & Co., 1938, pp. 170-171.

Changes in interest rates may, of course, have an effect on some types of borrowers. This same Mr. Hawtrey, for example, has elsewhere stressed the importance of changes in interest rates on the borrowing of traders, particularly wholesalers.<sup>10</sup> Even in such cases, there are certain to be times when an expected rise in the price of raw materials or a threatened shortage of some item are far more important determinants of inventory policy and short-term borrowing than changes in the interest rate.

The importance of any given rate of interest may, of course, vary from time to time, from place to place. There is thus no single "rate of interest." Great error can indeed result from thinking of the relationship between rates on different maturities as part of a "structure" of interest rates. The term "structure" suggests rigid relationships and differentials between differing maturities and qualities. That the differentials are not uniform is sufficiently evidenced by recalling the fact that short-term rates have not always been below long-term rates as they have been in the past two decades. Differences reflect variations in the supply and demand factors in different segments of the money and capital markets and anticipations as to future demands and supplies.

The fact that the two rates, long term and short term, tend to move together establishes no necessary causal connection between them. It may be that both are influenced by a common outside cause. This common outside cause is likely to be a reflection of what bankers and investors expect to happen to interest rates in the future. When a banker is considering short-term loans it is a sobering thought to remember that a variation of one-eighth percent in the yield of a 20-year bond means a change in capital values of several points. With long-term money rates at  $2\frac{1}{2}$  percent, a rise in the market rate of interest to 3 percent will, in the case of a 15-year bond, wipe out all interest income for nearly 3 years.

Examination of table 7 reflecting the capital depreciation involved in increasing yields for selected rates and maturities will illustrate the thoughts which must flash through a banker's mind when contemplating purchase of a long-term investment. Even the change between a yield of 2 percent and a yield of  $2\frac{1}{8}$  percent on a 10-year bond amounts to little less than a full year's interest lost. If we think of larger changes in the yield basis, the effect of capital depreciation and its influence on banking choice between the short-term loans and long-term investments is even greater. Banks generally hold short-term rather than long-term securities so that they can shift out of them to meet demands upon them without loss. If, however, there is assurance that the long-term rate will not rise, then banks need make no distinction. Under such circumstances the long- and short-term rates tend to be the same.

While a rise in yield and a fall in the price of bonds are but two sides of the same coin, the effects are quite different. A fall in the price of bonds is in the present. It affects immediately the bankers' viewpoint in dealing with present-day decisions. While the bank's solvency and his returns may not be affected if he holds the bonds to maturity, liquidity and current profits are reduced because the bond cannot be sold without a capital loss. The effect is therefore more immediate

<sup>10</sup> Hawtrey, R. G., *Currency and Credit*, Longmans, Green & Co., 1923, p. 25.



and its impact more striking than is the effect of the rise in rates which only makes itself felt on assets acquired in the future. The burden resulting from a rise in interest rates extending into the future impresses the economist who sees it working out through investment plans and relative costs. But to the banker the potential loss of capital value consequent to a rise in interest rates is likely to be more serious and shocking because it reduces not only his own liquidity but may destroy present collateral values as well. Where a fall in yield creates opportunities which must be slowly appraised and recognized, the rise in yield is more compelling in its certainty and immediacy.

TABLE 7.—*Equivalent bond values and yields—Selected rates and maturities*

Coupon rate	Yield basis	5 years	10 years	15 years	20 years
	<i>Percent</i>				
2 percent.....	2	100.00	100.00	100.00	100.00
	2½	99.40	98.90	98.40	97.97
	2¾	98.82	97.77	96.83	95.99
	3	97.66	95.90	93.78	92.17
	3½	95.39	91.42	87.99	85.04
2¼ percent.....	2¼	100.00	100.00	100.00	100.00
	2½	98.83	97.80	96.89	96.08
	2¾	97.68	95.65	93.89	92.35
	3	96.54	93.56	90.99	88.78
	3¼	95.42	91.52	88.20	85.38
2½ percent.....	2¼	101.18	102.23	103.17	104.01
	2½	100.00	100.00	100.00	100.00
	2¾	98.84	97.83	96.94	96.17
	3	97.68	95.71	94.00	92.52
	3½	95.45	91.62	88.41	85.70
2¾ percent.....	2¼	102.35	104.46	106.34	108.02
	2½	101.17	102.20	103.11	103.92
	2¾	100.00	100.00	100.00	100.00
	3	98.85	97.85	97.00	96.26
	3¼	97.71	95.76	94.10	92.69

The difference is important to policy and to would-be monetary manipulators. Mr. Frederick R. Macaulay of the National Bureau of Economic Research, suggests that monetary manipulation may be expected to be more effective in an inflationary situation such as the country faces today, than at some other times. "An examination of the historical facts," Macaulay reports, "strongly supports the thesis that a rise in the yield of interest-bearing obligations of the highest grade—whether they be of long or short maturity—has greater power to terminate a period of prosperity than has a fall in their yields to initiate such a period."<sup>11</sup>

It is difficult to answer the question posed at the beginning of this section: What are the restraining effects of action such as that recently taken by the Reserve authorities? Views of a few leading economists were sought on this question.<sup>12</sup>

Economists as a professional group are trained to trace the long-run consequences of changes in economic data and in the business climate; their task is to state the probable influence of any given factor introduced into the existing economic situation. It is not surprising, therefore, that the economists from whom comments were received were agreed that "other things being equal" any rise in interest rates

<sup>11</sup> Macaulay, Frederick R., *Some Theoretical Problems Suggested by the Movements of Interest Rates, Bond Yields, and Stock Prices in the United States Since 1856*, National Bureau of Economic Research, New York, 1938, p. 42.

<sup>12</sup> Their replies are presented in appendix H.

should theoretically work in the direction of discouraging borrowing. In spite of general agreement as to theoretical effects, sincere differences exist among the economists as to the practical significance of rising interest rates when other things are not equal.

Several of those replying were convinced that the effect of small interest rate increases at this time is likely to be negligible in the face of the strong inflationary tide. Others point out that the only reason for paying interest on Government securities is to make the securities sufficiently attractive so that they may be sold to savers, and buyers other than the Federal Reserve banks. Interest payments are seen as the only trustworthy block separating sound currency from the temptations of a greenback type of inflation. Since variations in interest rates offer a means of varying the attractiveness of Federal securities, even small increases in the rate earned thereon are desirable. But even those who insist upon the theoretical importance of small changes have had in the present instance to recognize the strong inductive evidence offered by persistent loan expansion over recent months.

#### PROPOSED PLANS FOR SPECIAL RESERVES

We have spoken of the problems of monetary control of inflationary tendencies, of the role of the Government debt, of the operation of interest rate changes, and the problem of capital depreciation. But the important thing behind all such discussion, in times like the present, is the maintenance of the Government credit on a stable basis. All agencies agree on that as the objective, no matter what sincere differences arise concerning means.

People sometimes speak ominously of the threat to Government credit implicit in the evidence of a higher interest paid by the Government. The assumption is that any rise in rates which the Government must pay is an expression of a lowered market appraisal. Because second-grade bonds bear higher rates of interest than first-grade bonds, it is assumed that higher yield on Governments at one time than at another is an indication of greater risk. A second point sometimes cited as evidence of the deterioration of Government credit is the decline of a Government bond to a price below par. "Below par" is taken as symptomatic of a loss of credit standing, or at least of the fear that it will be so interpreted by the world at large. Neither of these measures reflect the true threat to Government credit.

The real threat to Government credit comes when people foresee a fall in the value of their money invested in Government bonds. When investors grow reluctant to buy Government bonds because of the fear of loss in the purchasing power of the future dollars, Government credit is endangered far more than any rise in interest rates or fall below par of any issue can possibly signify. It is then that we must "choose between maintaining the price of Government bonds and maintaining the real value of those bonds."

Recognition of the dilemma presented inevitably drives us to considering whether or not some ingenious device may not make it possible to maintain stability in the security market while dampening inflationary pressure inherent in bank-held Government debt.<sup>13</sup>

One proposal, granting additional authority to the Federal Reserve with respect to special commercial bank reserves, was recommended

<sup>13</sup> Compare R. S. Sayers, *Central Banking in the Light of Recent British and American Experience*, *Quarterly Journal of Economics*, May 1949.

by the Board of Governors for use as an anti-inflationary weapon under the circumstances which prevailed at the end of World War II. While the situation today differs materially, the suggestion is worthy of reexamination. Variations and adaptations have been suggested by others with a view to perfecting the application and administration of the device. The Board's annual report of 1945 outlined the special reserve plan as follows:

\* \* \* empower the Board of Governors to require all commercial banks to hold a specified percentage of Treasury bills and certificates as secondary reserves against their net demand deposits. To aid banks in meeting this requirement, they should be permitted to hold vault cash or excess reserves in lieu of Government securities. This measure would result in stability of interest yields on short-term Government securities and, therefore, of the cost of the public debt. Like the bond portfolio limitation, it would provide a measure for regulating commercial banks' demands for short-term Government securities relative to their demands for longer-term issues. At the same time, it would leave considerable freedom for movement of interest yields on non-Government paper of short-term maturity.

On November 25, 1947, the proposal was further explained before the Joint Committee on the Economic Report by the then Chairman of the Board of Governors, Mr. Eccles. In seeking an alternative to restraining further bank credit expansion through the use of higher interest rates he pointed to the special reserve requirements as being the only proposal available which would—

not make the Government and the taxpayer bear the added cost of the restraint, that will impose very little, if any, hardship on the banks, that will, in fact, have a compensating aspect in that the restraint imposed would increase interest rates on private borrowings without additional cost to the Government.<sup>14</sup>

The January 1948 Economic Report of the President, while not necessarily endorsing the special reserve plan, called for a close study of the proposal. The report of the staff of the Joint Economic Committee pointed out that it met in part the Treasury objection to measures of credit restriction which threaten to increase interest rates and therefore to increase the burden of interest on the public debt as outstanding securities mature and are refunded; that it would be possible under such a regulation to increase reserve requirements much more drastically than would otherwise be possible because in effect it would give the banks some interest on their reserve balances.

#### THE PROBLEM IN FOREIGN COUNTRIES

Under diverse political regimes democratic countries of the world have faced a similar problem of reconciling the dictates of monetary policy with the problems of debt management. Some have adopted the supplemental reserve requirements with variants; others have tried selective credit controls, differential interest rates, bond limitation plans, and still other devices.

In Mexico, for example, the secondary reserve requirements have been employed to influence the kinds as well as the aggregate of bank lending; types of loans which the authorities wish to promote are included along with Government securities among assets filling the secondary reserve requirements.

<sup>14</sup> Further discussion of the special reserve plan by former Chairman Eccles is given in appendix G: Item 1, excerpt from hearings before the Joint Committee on the Economic Report, Anti-Inflation Program as Recommended in the President's Message of November 17, 1947 (80th Cong., 1st sess., pp. 142-144). Item 2, excerpt from an article, The Defense of the Dollar, Fortune magazine, November 1950.

In Australia, commercial banks are required to maintain in special accounts at the central bank a proportion of new assets as stipulated by the bank. Virtually all increases in deposits in excess of 1939 levels were once impounded in these accounts; the percentage of new funds thus frozen may then be varied as inflationary pressures are intensified or relaxed.

In France, each bank was required to continue to hold the same volume of Government securities that it held on October 1, 1948, and to invest a stated percentage of any increase in deposits in Government securities. The decision to freeze existing holdings rather than apply a uniform reserve percentage had the advantage of recognizing great differences among banks in their existing asset structures. The effect has been that commercial banks have been prevented from selling Government securities in order to obtain funds with which to increase inflationary private lending.

Beside quantitative control on credit expansion, many countries have employed qualitative controls. In the United Kingdom, the Capital Issues Committee established during the war with responsibility for approving flotations of new industrial issues has been continued and its criteria communicated to commercial banks for their guidance in approving new business loans. Qualitative criteria governing commercial bank lending have likewise been established in Australia and elsewhere. In the Netherlands all bank credits in excess of a stated minimum must be approved by the central bank.

The examples given have been chosen from the more complete discussion of procedures and techniques employed in foreign countries presented herewith in appendix I. Many of the techniques are ingenious and new. Their variety suggests that there is no easy answer to the problem of treasury-central bank relationships in the postwar world. But the variety of ways in which the problem has been met points also to the desirability of thorough study of the issues in this country in the optimistic belief that a democratic American solution can be found.

# APPENDIXES

## APPENDIX A

**TABLE 1.—Money rates on U. S. Government and corporate securities (percent per annum)**

	U. S. Government securities				Corporate	
	3-month bills	9- to 12-month certificates	7- to 9-year bonds	15 years or more bonds	Aaa	Baa
1949—July 2.....	1.052	1.16	1.60	2.34	2.70	3.48
Dec. 21.....	1.081	1.09	1.67	2.18	2.57	3.27
1950—June 17.....	1.174	1.23	1.82	2.32	2.62	3.27
June 24.....	1.172	1.23	1.84	2.34	2.61	3.28
July 1.....	1.174	1.23	1.86	2.34	2.63	3.32
July 8.....	1.168	1.23	1.85	2.34	2.65	3.33
July 15.....	1.173	1.22	1.84	2.34	2.66	3.33
July 22.....	1.174	1.23	1.83	2.34	2.66	3.33
July 29.....	1.174	1.23	1.82	2.34	2.65	3.28
Aug. 5.....	1.174	1.23	1.82	2.34	2.62	3.27
Aug. 12.....	1.174	1.23	1.83	2.34	2.61	3.24
Aug. 19.....	1.173	1.23	1.82	2.34	2.61	3.23
Aug. 26.....	1.247	1.30	1.80	2.32	2.61	3.23
Sept. 2.....	1.285	1.32	1.84	2.33	2.61	3.22
Sept. 9.....	1.308	1.33	1.87	2.35	2.62	3.21
Sept. 16.....	1.311	1.33	1.89	2.37	2.64	3.20
Sept. 23.....	1.317	1.33	1.89	2.37	2.67	3.22
Sept. 30.....	1.324	1.34	1.90	2.37	2.66	3.22
Oct. 7.....	1.324	1.35	1.91	2.37	2.66	3.22
Oct. 14.....	1.337	1.35	1.94	2.38	2.66	3.22
Oct. 21.....	1.337	1.40	1.96	2.39	2.67	3.22
Oct. 28.....	1.316	1.45	1.96	2.38	2.68	3.23
Nov. 4.....	1.341	1.47	1.96	2.39	2.68	3.23
Nov. 11.....	1.350	1.47	1.95	2.38	2.67	3.22
Nov. 18.....	1.366	1.47	1.94	2.37	2.66	3.21
Nov. 25.....	1.380	1.47	1.94	2.37	2.66	3.21
Dec. 2.....	1.383	1.46	1.96	2.38	2.67	3.21
Dec. 9.....	1.366	1.46	1.98	2.39	2.68	3.22
Dec. 16.....	1.351	1.46	1.97	2.39	2.67	3.21
Dec. 23.....	1.368	1.47	1.96	2.38	2.67	3.20
Dec. 30.....	1.382	1.47	1.98	2.39	2.66	3.19

Source: Board of Governors of the Federal Reserve System.

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**TABLE 2.—Weekly reporting member banks—leading cities selected classes of loans outstanding**

[In billions of dollars]

	Total loans and securities <sup>1</sup>		Commercial, industrial and agricultural		Real estate and other		To brokers and dealers for securities, New York City only <sup>1</sup>
	Leading cities	Outside New York City	Leading cities	Outside New York City	Leading cities	Outside New York City	
1950—June 21.....	31.0	21.8	13.5	8.8	9.5	8.2	1.0
June 28.....	31.3	21.9	13.6	8.9	9.6	8.2	1.1
July 5.....	31.5	22.1	13.7	8.9	9.6	8.3	1.0
July 12.....	31.3	22.0	13.7	9.0	9.7	8.3	.9
July 19.....	31.7	22.2	13.8	9.0	9.8	8.4	.8
July 26.....	32.3	22.5	13.9	9.1	9.9	8.5	.8
Aug. 2.....	32.4	22.5	14.0	9.1	9.9	8.5	.8
Aug. 9.....	32.8	22.8	14.2	9.2	10.0	8.6	.8
Aug. 16.....	33.0	23.0	14.4	9.3	10.0	8.7	.8
Aug. 23.....	33.3	23.2	14.5	9.4	10.3	8.8	.8
Aug. 30.....	33.5	23.3	14.7	9.5	10.4	8.8	.7
Sept. 6.....	33.8	23.6	14.9	9.6	10.5	8.9	.7
Sept. 13.....	34.0	23.7	15.3	9.8	10.5	8.9	.7
Sept. 20.....	34.7	24.0	15.5	10.0	10.6	9.0	.8
Sept. 27.....	34.9	24.9	15.7	10.1	10.9	9.1	.8
Oct. 4.....	35.0	25.0	15.9	10.2	10.7	9.1	.8
Oct. 11.....	35.3	24.6	16.1	10.3	10.7	9.1	.8
Oct. 18.....	35.3	24.6	16.1	10.1	10.8	9.1	.7
Oct. 25.....	35.5	24.8	16.3	10.6	10.8	9.2	.7
Nov. 1.....	35.7	25.0	16.5	10.7	10.9	9.2	.8
Nov. 8.....	36.0	25.2	16.7	10.8	10.9	9.2	.7
Nov. 15.....	36.1	25.3	16.9	11.0	10.9	9.2	.8
Nov. 22.....	36.4	25.4	17.0	11.0	11.0	9.3	.8
Nov. 29.....	36.9	25.6	17.1	11.1	11.0	9.3	.8
Dec. 6.....	36.9	25.6	17.3	11.2	11.0	9.3	.8
Dec. 13.....	36.9	25.7	17.5	11.3	11.1	9.4	.8
Dec. 20.....	37.6	26.0	17.8	11.5	11.1	9.4	.8
Dec. 27.....	38.1	26.3	17.8	11.5	11.2	9.4	.8
1951—Jan. 3.....	38.0	26.1	17.9	11.5	11.2	9.4	.8

<sup>1</sup> Other than U. S. Government obligations.

Source: Federal Reserve Bulletin, and weekly releases.

TABLE 3.—Maturity schedule of interest-bearing public marketable securities issued by the U. S. Government and outstanding Oct. 31, 1950<sup>1</sup>

[In millions of dollars]

Year and month	Description of security <sup>2</sup>	Amount of maturities		
		Fixed maturity issues	Callable issues classified by year of—	
			First call	Final maturity
1950—				
December	1½ percent bond, Dec. 15, 1950	2,635		
1951—				
January	1½ percent certificate, Jan. 1, 1951	5,373		
June	2¾ percent bond, June 15, 1951-54		1,627	
July	1¼ percent note, July 1, 1951	2,741		
	do.	886		
	do.	4,818		
August	1¼ percent note, Aug. 1, 1951	5,351		
September	2 percent bond, Sept. 15, 1951-53		7,986	
	3 percent bond, Sept. 15, 1951-55		755	
October	1¼ percent note, Oct. 1, 1951	1,918		
	1¼ percent note, Oct. 15, 1951	5,940		
November	1¼ percent note, Nov. 1, 1951	5,254		
December	2¾ percent bond, Dec. 15, 1951-53		1,118	
	2 percent bond, Dec. 15, 1951-55		510	
1952—				
March	2½ percent bond, Mar. 15, 1952-54		1,024	
June	2 percent bond, June 15, 1952-54		5,825	
	2¾ percent bond, June 15, 1952-55		1,501	
December	2 percent bond, Dec. 15, 1952-54		8,662	
1953	Total		725	9,104
1954	do.	4,675	681	17,138
1955	do.	5,365	2,611	3,491
1956	do.		6,253	681
1958	do.		919	1,449
1959	do.		8,754	4,804
1960	do.		1,485	2,611
1961	do.	50		
1962	do.		2,118	8,754
1963	do.		2,831	919
1964	do.		7,599	
1965	do.		5,197	1,485
1966	do.		3,481	
1967	do.		22,372	2,118
1968	do.			2,831
1969	do.			7,599
1970	do.			5,197
1971	do.			3,481
1972	do.			22,372

<sup>1</sup> Excludes from 12 to 15 billion 91-day bills maturing and replaced about one-third each month.

<sup>2</sup> It should be noted that callable issues appear twice in this column, once in the year of first call and again in the year of final maturity.

<sup>3</sup> Exchange offering announced Nov. 22, 1950.

Source: Treasury Bulletin.

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TABLE 4.—Interest on Federal Public Debt in relation to national income and Federal budget receipts, 1870–1950

[Billions of dollars]

	Total national income <sup>1</sup>	Governmental receipts <sup>2</sup>	Interest on public debt <sup>3</sup>	Interest on public debt as percent of—	
				National income	Federal receipts
1870.....	( <sup>2</sup> )	0.41	0.13		31.4
1880.....	( <sup>2</sup> )	.33	.10		36.0
1890.....	( <sup>2</sup> )	.40	.04		9.0
1900.....	( <sup>2</sup> )	.57	.04		7.1
1910.....	( <sup>2</sup> )	.68	.02		3.2
1920.....	( <sup>2</sup> )	6.69	1.02		15.2
1929.....	87.4	4.03	.68	0.8	16.9
1930.....	75.0	4.18	.66	.9	15.8
1931.....	58.9	3.12	.61	1.0	19.6
1932.....	41.7	1.92	.59	1.4	30.7
1933.....	39.6	2.02	.69	1.7	34.2
1934.....	48.6	3.06	.76	1.6	24.8
1935.....	56.8	3.73	.82	1.4	22.0
1936.....	64.7	4.07	.74	1.1	18.2
1937.....	73.6	4.98	.86	1.2	17.3
1938.....	67.4	5.80	.93	1.4	16.0
1939.....	72.5	5.10	.94	1.3	18.4
1940.....	81.3	5.26	1.04	1.3	19.8
1941.....	103.8	7.23	1.11	1.1	15.4
1942.....	137.1	12.70	1.26	.9	9.9
1943.....	169.7	22.20	1.81	1.1	8.2
1944.....	183.8	43.90	2.61	1.4	5.9
1945.....	182.7	44.76	3.62	2.0	8.1
1946.....	180.3	40.03	4.72	2.6	11.8
1947.....	198.7	40.04	4.96	2.5	12.4
1948.....	223.5	42.21	5.21	2.3	12.3
1949.....	216.8	38.25	5.34	2.5	14.0
1950.....	( <sup>2</sup> )	37.05	5.75		15.5

<sup>1</sup> For year ending Dec. 31.

<sup>2</sup> For year ending June 30.

<sup>3</sup> Not available.

Sources: Treasury Bulletin, September 1950, and the Midyear Economic Report of the President, July 1950.



TABLE 5.—Computed interest charge and computed annual interest cost on Federal securities, by types of issue, 1946-50

End of fiscal year	Marketable issues					Nonmarketable issues	Special issues	Total
	Bills	Certificates	Notes	Bonds	Total			
Computed annual interest rate (percentage)								
1946.....	0.381	0.875	1.289	2.307	1.773	2.567	2.448	1.996
1947.....	.382	.875	1.448	2.307	1.871	2.593	2.510	2.107
1948.....	1.014	1.042	1.204	2.309	1.941	2.623	2.588	2.182
1949.....	1.176	1.225	1.375	2.313	2.000	2.629	2.596	2.236
1950.....	1.187	1.163	1.344	2.322	1.957	2.569	2.589	2.200
Estimated interest cost, annual basis (millions of dollars)								
1946.....	65	305	235	2,757	3,362	1,442	547	5,351
1947.....	60	221	118	2,757	3,156	1,531	687	5,374
1948.....	139	235	137	2,601	3,112	1,561	782	5,455
1949.....	136	360	49	2,558	3,103	1,652	851	5,606
1950.....	161	214	274	2,391	3,040	1,735	838	5,613
Percentage of total interest cost, annual basis (percentage)								
1946.....	1.21	5.70	4.4	51.5	62.9	26.9	10.2	100
1947.....	1.12	4.11	2.2	51.3	58.7	28.5	12.8	100
1948.....	2.54	4.31	2.5	47.7	57.1	28.6	14.3	100
1949.....	2.43	6.42	.9	45.6	55.3	29.5	15.2	100
1950.....	2.87	3.81	4.9	42.6	54.2	30.9	14.9	100

Source: Computed from Treasury Bulletin, September 1950.

NOTE.—The amounts of computed annual interest charges shown here differ from the actual expenditures for interest for a number of reasons, including (1) interest charges on series E and F savings bonds are computed at average rate of return (2.90 percent and 2.53 percent, respectively), whereas expenditures include additions to redemption values each year, which are smaller in the early years and larger in the latter years of the life of these bonds, (2) expenditure before fiscal year 1950 for issues other than savings bonds do not include interest accumulated but not paid, whereas those for 1950 include \$225,000,000 accumulated in previous years; (3) variations during year in amounts of different types of issues outstanding and in coupon rates.

TABLE 6.—Military procurement price trends

Since the spring of 1950, prices have risen markedly, particularly after the start of the conflict in Korea. The Bureau of Labor Statistics' wholesale price index is now at an all-time high, reaching a level of 171.7 on November 28, a rise of 12.3 percent since April 1950 and an increase of 2.5 percent during the past 2 months. Many basic raw materials have increased in price to an even greater extent than have finished commodities, including a number of key commodities used in the manufacture of items required by the armed services, as shown by the following table:

Commodity	Unit	Price			Percent increase		
		April 1950	Sept. 8, 1950	Dec. 4, 1950	April to September	April to December	September to December
Burlap.....	Yard....	\$0.172	\$0.242	\$0.302	40.7	75.6	24.8
Copper.....	Pound..	.184	.234	.244	27.2	32.6	4.3
Cotton.....	....do..	.320	.407	.412	27.2	28.8	1.2
Crude rubber.....	....do..	.21	.55	.65	161.9	209.5	18.2
Hides.....	....do..	.242	.33	.365	36.4	50.8	10.6
Lead.....	....do..	.105	.16	.17	52.4	61.9	6.2
Print cloth, cotton.....	Yard....	.14	.21	.225	50.0	60.7	7.1
Steel scrap (Philadelphia).....	Ton....	24.00	38.00	38.50	58.3	60.4	1.3
Tin.....	Pound..	.75	.99	1.39	32.0	85.3	40.4
Wool tops.....	....do..	1.87	3.02	3.135	61.5	67.6	3.8
Zinc.....	....do..	.112	.182	.182	62.5	62.5	-----

Due to the existence of fixed-price contracts for many items, the rise in basic commodity prices was not fully and immediately reflected in procurement prices paid by the armed services. However, the increase in general price level is being felt more and more by the armed services. With the exception of meats, the price of which has dropped seasonally during the past 2 months, and a few other scattered items, higher prices are being encountered in an ever-increasing number of items. These price rises are becoming increasingly wide-spread despite efforts to reduce costs wherever feasible by simplification of specifications and substitution of materials. The recent steel industry wage and price increases will undoubtedly lead to further increases in the prices of many military procurement items.

One of the key commodities affected by the Korean conflict has been aviation gasoline. Preliminary screening of offers for delivery of aviation gasoline starting in January 1951 indicates the following price increases per gallon for normal production:

	July 1, 1950, average	November 1950 average quotation for January 1951 delivery	Percent in- crease
Grade 115/145 aviation gasoline:			
United States Gulf.....	\$0.1675	\$0.1725	3.0
West coast.....	.1565	.1775	13.4
Grade 100/130 aviation gasoline:			
United States Gulf.....	.155	.16	3.2
West coast.....	.144	.165	14.6

However, normal production is not adequate to meet current armed services needs for aviation gasoline. Consequently, part of the aviation gasoline supplies of the armed services are being derived from marginal production, utilizing materials, plant facilities, and transportation practices that are not economical under normal conditions. As a result, premiums of varying amounts are being paid for the supply increments furnished from marginal sources, ranging from 5 to 45 percent, depending upon the particular circumstances involved.

It must be recognized that it is difficult to compare prices at different times for much of the matériel procured by the armed services because of changes in quantities involved, changes in specifications, changes in manufacturing methods and processing techniques, resort to marginal producers or methods, existence of price redetermination clauses in contracts, etc. Direct price comparisons can best be made on relatively standard-type items that are subject to little change in specifications. Such a list of representative items, indicating procurement prices applicable to each of the services and to the Armed Services Petroleum Purchasing Agency, is contained in the attached table.

Military procurement prices before and after the attack on Korea (April 1950, August–September 1950, and October–November 1950)

Commodity	Unit	Price			Percent increase or decrease (—)		
		April 1950	August–September 1950	October–November 1950	April to August–September	April to October–November	August–September to October–November
<b>A. S. P. P. A.</b>							
Fuel oil, f. o. b. tanker:							
West coast.....	Barrel.....	\$0.99	\$1.53	\$2.10	54.5	112.1	37.3
Caribbean.....	do.....	1.70	1.83	1.92	7.6	12.9	4.9
Motor gasoline, f. o. b. tanker:							
West coast.....	do.....	3.90	4.38	4.59	12.3	17.7	4.8
United States Gulf.....	do.....	3.59	3.82	4.30	6.4	19.8	12.6
Diesel fuel, f. o. b. tanker:							
West coast.....	do.....	3.33	3.28	3.65	-1.5	9.6	11.3
United States Gulf.....	do.....	2.92	3.36	3.36	15.1	15.1	-----
<b>ARMY</b>							
Ambulance, Metropolitan, ¾-ton, 4 by 2.....	Each.....	3,774.20	(?)	4,224.20	-----	11.9	-----
Automobile, sedan, light.....	do.....	1,132.00	1,284.00	(?)	13.4	-----	-----
Truck, pick-up, ½ ton, 4 by 2.....	do.....	952.62	(?)	1,014.87	-----	6.5	-----
Truck, stake and platform, 1½ ton, 4 by 2.....	do.....	1,471.77	(?)	1,697.13	-----	15.3	-----
Water tank trailer, 1 ton.....	do.....	793.17	914.76	(?)	15.3	-----	-----
Battery:							
2E.....	do.....	9.15	11.53	(?)	26.0	-----	-----
2H.....	do.....	12.55	14.58	(?)	16.2	-----	-----
3E.....	do.....	11.21	15.84	(?)	14.3	-----	-----
Tire:							
6.50 by 20, 8 ply.....	do.....	16.14	20.46	(?)	26.8	-----	-----
7.50 by 20.....	do.....	23.99	28.93	33.18	20.6	38.3	14.7
Bearing bushing.....	do.....	.79	1.38	(?)	74.7	-----	-----
Gasket set.....	do.....	.0849	.12757	(?)	50.3	-----	-----
Wiring harness.....	do.....	3.12	4.14	(?)	32.7	-----	-----
Fuel tank.....	do.....	9.15	12.75	(?)	39.3	-----	-----
Sprocket.....	do.....	15.00	18.45	(?)	23.0	-----	-----
Nut.....	do.....	.01265	.0146	(?)	15.4	-----	-----
Battery assembly hanger.....	do.....	2.95	3.43	(?)	16.3	-----	-----
Flange transfer brace drum.....	do.....	1.72	1.99	(?)	15.7	-----	-----
Filter oil breather.....	do.....	1.80	1.95	(?)	8.3	-----	-----
Carriage bolts.....	do.....	.0135	.01533	(?)	13.6	-----	-----

See footnotes at end of table, p. 33.

Military procurement prices before and after the attack on Korea (April 1950, August-September 1950, and October-November 1950)—Con.

Commodity	Unit	Price			Percent increase or decrease (-)		
		April 1950	August-September 1950	October-November 1950	April to August-September	April to October-November	August-September to October-November
ARMY—continued							
Steering knuckle assembly.....	Each	\$15.84	\$19.9368	(?)	25.9		
Shaft (automotive).....	do	22.77	24.74	(?)	8.7		
Hood support.....	do	.77	.83	(?)	7.8		
Roller bearing.....	do	11.80	12.39	(?)	5.0		
Carburetor assembly.....	do	22.709	23.7115	(?)	4.4		
Steering arm.....	do	7.8178	8.316	(?)	6.4		
Generator.....	do	52.63	55.75	(?)	5.9		
Lumber:							
Southern pine, No. 2 common.....	Thousand board feet	66.00	97.00	\$72.00	47.0	9.1	-25.8
Douglas fir.....	do	67.50	82.50	\$82.50	22.2	22.2	
Bailey bridges.....	Each	37,796.00	51,792.00	\$51,792.00	37.0	37.0	
Fire hose, cotton, rubber-lined.....	50 feet	20.64	23.10	\$23.10	11.9	11.9	
Astrolabe.....	Each	1,200.00	1,311.00	\$1,311.00	9.2	9.2	
Beach tractor.....	do	10,188.00	10,840.00	\$10,840.00	6.4	6.4	
Storage battery.....	do	9.07	10.74	\$10.74	18.4	18.4	
Wire rope.....	Foot	.1329	.164	\$ .164	23.4	23.4	
20-ton trailer.....	Each	3,287.00	3,540.00	\$3,540.00	8.0	8.0	
Shop bench.....	do	215.00	270.00	\$270.00	25.6	25.6	
Road roller.....	do	5,345.00	5,735.00	\$5,735.00	7.3	7.3	
Motor lead cable.....	Foot	.044	.057	\$ .057	29.5	29.5	
Barbed wire.....	Spool	6.39	7.25	\$7.25	13.4	13.4	
Sisal rope.....	Foot	.03841	.0456	\$ .0456	18.7	18.7	
Cable, 3-conductor.....	do	.0355	(?)	.063		77.7	
Chest drafting set No. 8.....	Each	68.50	(?)	95.00		38.7	
Wire, magnet:							
No. 28 AWG.....	Pound	.47	(?)	.625		33.0	
No. 27 AWG.....	do	.45	(?)	.63		40.0	
No. 25 AWG.....	do	.42	(?)	.57		35.8	
Fire extinguisher.....	Each	36.86	37.98	\$37.98	3.0	3.0	
Antenna equipment, RC-292.....	do	134.88	144.88	(?)	7.4		
Switchbox, BC-658.....	do	10.05	12.04	(?)	19.8		
Field wire, WD-1/TT.....	Mile	58.02	68.17	74.03	17.5	27.6	8.6
Communications equipment, AN/GRC-26.....	Each	11,353.91	(?)	12,364.03			8.9

Radio set:									
AN/PRC-10.....	do	263.88	(?)	382.50		45.0			
SCR-399.....	do	5,080.92	(?)	5,901.66		16.2			
Battery, BA-70.....	do	5.01	(?)	5.66		13.0			
Broom, corn.....	Dozen	11.25	12.53	12.53	11.4	11.4			
Steel wool.....	Pound	.218	.265	.3407	21.6	56.3	28.6		
Soap powder, hand scouring.....	do	.090	.1201	.1235	33.4	37.2	2.8		
Mop, cotton.....	Each	.4675	.6875	.750	25.7	60.4	27.7		
Burlap, jute, 40 inch.....	Yard	.1711	.2325	.310	35.9	81.2	33.3		
Sack, burlap, 57 by 50 inches.....	Each	.4170	.5823	.756	30.6	81.3	29.8		
Dishwashing machine, model 180DA.....	do	1,454.62	1,554.00	1,629.06	0.8	12.0	4.8		
Paper, typewriter, bond.....	Ream	6.435	8.36	9.65	29.9	50.0	15.4		
Barrier, waterproof:									
Type C-1.....	Roll	4.16	4.90	5.22	17.8	25.5	6.5		
Type L-2.....	do	11.06	11.80	13.88	0.7	25.5	17.6		
Type M.....	do	7.45	8.53	9.35	14.5	25.5	9.6		
Box, fiber, shipping.....	Each	.82771	1.241	1.293	49.9	55.0	3.4		
Drawers, cotton, shorts, white.....	Pair	.4233	.5246	.555	23.9	31.1	5.8		
Cut, make and trim:									
Trousers, cotton, khaki.....	do	.740	.860	.968	16.2	30.8	12.6		
Shirt, stand-up collar.....	Each	.588	(?)	.769		30.8			
Socks, wool, cushion sole.....	Pair	.575	.635	.681	10.4	18.6	7.2		
Cloth:									
Cotton:									
Twill, 5-ounce.....	Yard	1.27	1.555	1.64222	22.4	29.3	5.6		
Chambray, 3-ounce.....	do	.39	.44	.4697	12.8	20.4	6.8		
Wool:									
Lining, 12-ounce.....	do	1.65	2.05	2.307	24.2	39.8	12.5		
Serge, 15-ounce.....	do	3.595	4.555	5.026	26.7	39.8	10.3		
Serge, 12-ounce.....	do	3.63	4.463	5.075	22.9	39.8	13.7		
Lining, 15-ounce.....	do	1.78	2.247	2.488	26.2	39.8	10.7		
Serge, 18-ounce.....	do	3.8176	4.890	5.337	28.1	39.8	10.0		
Pile.....	do	4.90	6.274	6.850	28.0	39.8	9.2		
Webbing, cotton, 1-inch.....	do	.0413	.059	.0598	42.9	44.8	1.4		
Shoes, low quarter.....	Pair	3.7364	(?)	4.910		31.4			
Boots, service, combat.....	do	5.720	(?)	8.148		42.4			
Drawers, winter, M-40.....	do	3.020	(?)	3.577		18.4			
Undershirts, winter M-50.....	Each	2.740	(?)	3.291		20.1			
Box and sleeve, shipping, fiber.....	Set	1.5996	1.6794	1.794	13.3	18.8	13.1		
Gasoline drum, 5-gallon.....	Each	1.7891	1.9791	1.79	10.6	1	-9.6		
Bacon, smoked.....	Pound	.38	.4875	.4352	28.3	14.5	-10.7		
Beef:									
Boneless.....	do	.6438	.6718	.6209	4.3	-3.6	-7.6		
Carcass.....	do	.4602	.4741	.4651	3.0	1.1	-1.9		
Ham, smoked.....	do	.5367	.5323	.4734	-8	-11.8	-11.1		
Lard.....	do	.1329	.1802	.1581	35.6	19.0	-12.3		
Sausage.....	do	.3650	.4738	.4152	29.8	13.8	-12.4		
Pork.....	do	.4245	.5523	.4350	30.1	2.5	-21.2		
Chicken, dressed.....	do	.3835	.4150	.3942	8.2	2.8	-5.0		
Eggs, shell.....	Dozen	.3746	.5163	.5715	37.8	52.6	10.7		
Milk, frozen.....	Quart	.1357	.1765	.1909	30.1	40.7	8.2		

See footnotes at end of table, p. 33.

Military procurement prices before and after the attack on Korea (April 1950, August-September 1950, and October-November 1950)—Con.

Commodity	Unit	Price			Percent increase or decrease (-)		
		April 1950	August-September 1950	October-November 1950	April to August-September	April to October-November	August-September to October-November
NAVY							
Space heater, 50,000 B. t. u.	Each	\$38.00	\$45.00	\$53.00	18.4	39.5	17.8
Steam tables, Marine Corps standard	do.	2,800.00	3,200.00	3,547.00	14.3	26.7	10.8
Briggs & Stratton carburetor	do.	2.64	(?)	4.40		66.7	
Dorman kit exp. plug	do.	6.25	(?)	9.94		59.0	
Grease-fitting kits	do.	6.40	(?)	21.80		240.6	
Crane, T/A-8121	do.	244.00	(?)	426.00		74.6	
Connector, cable 17-C-29865-500	do.	.195	.2539		30.2		
Tester, voltage 17-T-5555	do.	.275	.35		27.3		
Rope, wire, 916-inch 22-R-2268-135	Foot	.119	(?)	.238		100.0	
Crane, truck 1/2-yard, 78-C-33600	Each	18,380.00	(?)	21,000.000		14.3	
Differential shaft, 4-B2007	do.	36.41	(?)	58.02		59.4	
Dry battery:							
BA-44	do.	1.7572	(?)	2.30		30.9	
BA-202/U	do.	.0704	(?)	.125		77.6	
BA-205/U	do.	.3360	(?)	.60		48.8	
BA-37	do.	.1575	(?)	.33		109.5	
BA-152	do.	.2730	(?)	.48		75.8	
Lights, timing 41-L-1440	do.	2.42	* 2.42	3.87		59.9	59.9
Mattresses	do.	(?)	8.00	13.23			65.4
Sheets	do.	(?)	1.50	2.26			50.7
Enamel, semigloss	Gallon	1.68	2.75	2.75	63.7	63.7	
Mount, trailer, mmt. MG, M55	Each	5,000.00	9,500.00	9,500.00	90.0	90.0	
Shell, smoke, M313, w/f PD, M57	do.	23.89	37.22	37.22	55.8	55.8	
Actuator	do.	.28	.70	.70	150.0	150.0	
Bearing, flash hider	do.	.92	2.30	2.30	150.0	150.0	
Screw, forearm	do.	.15	.38	.38	153.3	153.3	
Sight, rear assembly	do.	6.00	15.00	15.00	150.0	150.0	
Adhesive tape, 3 inches by 5 yards	Roll	.26	.30	.314	15.4	20.8	4.7
Surgical gloves, rubber	Pair	.178	.22	.256	23.6	43.8	16.4
Glycerin	Pound	.35	.75	.85	114.3	142.9	13.3
Instrument and medicine cabinet	Each	195.00	220.00	210.00	12.8	7.7	-4.5
Vitamin A in oil	50 cc	.364	.436	.47	19.8	29.1	7.8
Sedan, 6-passenger	Each	1,128.00	(?)	1,284.00		13.8	

<b>Crane:</b>							
10 ton, truck mounted.....	do.....	15,390.00	16,884.00	21,392.00	9.7	39.0	26.7
15 ton, truck mounted.....	do.....	16,000.00	17,529.00	24,500.00	9.6	53.1	39.8
20 ton, truck mounted.....	do.....	19,700.00	22,500.00	28,250.00	14.2	43.4	25.6
34 cubic yard, crawler.....	do.....	17,940.00	18,559.00	23,000.00	3.4	28.2	9.9
1½ cubic yards, crawler.....	do.....	32,855.00	42,945.00	46,345.00	30.7	41.1	9.2
Tractors, 130 to 160, DBHP.....	do.....	15,363.00	15,579.00	16,500.00	1.4	7.4	5.9
Oscilloscope OS-8/U.....	do.....	139.00	219.00	219.00	57.6	57.6	-----
<b>AIR FORCE</b>							
<b>Height finder:</b>							
AN/TPS-10D.....	do.....	35,880.00	43,587.00	\$ 49,822.00	21.5	38.9	14.3
AN/MPS-4.....	do.....	67,000.00	77,050.00	( <sup>2</sup> )	15.0	-----	-----
Compound carbon removal.....	Gallon.....	1.07	( <sup>2</sup> )	1.50	-----	40.2	-----
Paint remover.....	do.....	1.29	( <sup>2</sup> )	1.55	-----	20.2	-----
Aluminum alloy sheet.....	Pound.....	.369	( <sup>2</sup> )	.384	-----	4.1	-----
A-5 inspection light.....	Each.....	3.20	( <sup>2</sup> )	4.75	-----	48.4	-----
Electric cable.....	Foot.....	.072	( <sup>2</sup> )	.080	-----	11.1	-----
Jacket, flying, type B-15B.....	Each.....	16.50	( <sup>2</sup> )	25.00	-----	51.5	-----
Suit, flying, nylon, K-2.....	do.....	9.47	( <sup>2</sup> )	14.00	-----	47.8	-----
Shirt, flying, wool, type A-1.....	do.....	7.84	( <sup>2</sup> )	10.00	-----	27.6	-----
Protective helmet.....	do.....	20.20	( <sup>2</sup> )	26.84	-----	32.9	-----
Sun glasses.....	Pair.....	2.29	( <sup>2</sup> )	3.00	-----	31.0	-----
<b>Parachutes:</b>							
T-7A parachute assembly with reserve canopy.....	Each.....	198.30	( <sup>2</sup> )	300.77	-----	51.7	-----
G-11 100-foot cargo chute.....	do.....	1,287.00	( <sup>2</sup> )	1,798.66	-----	39.8	-----

<sup>1</sup> Represents estimated average of offers received in November for deliveries to start January 1951.

<sup>2</sup> No procurement during this period.

<sup>3</sup> Estimated.

<sup>4</sup> Gasoline, drum, 5-gallon procurement during November 1950 was for large quantity (1,000,000 units), awarded to a single company.

<sup>5</sup> October 1950 prices.

Source: Progress Reports and Statistics, Office of Secretary of Defense, Dec. 4, 1950.

## APPENDIX B

Statement for the press. For immediate release, August 18, 1950]

## BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

At meetings today of the Board of Governors and the Federal Open Market Committee, the following statement was approved:

"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 \$1½ 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."

## APPENDIX C

[S-2423. Immediate release, Friday, August 18, 1950]

## TREASURY DEPARTMENT, INFORMATION SERVICE

Secretary of the Treasury Snyder announced today that he will offer a 1¼ percent, 13-month Treasury note, dated September 15, 1950, and maturing on October 15, 1951, in exchange for the 2 percent bonds and the 2½ percent bonds called for redemption on September 15, 1950, and the 1½ percent certificate of indebtedness maturing on that date; and that he will offer a 13-month, 1¼ percent note dated October 1, 1950, and maturing on November 1, 1951, in exchange for the 1½ percent certificate of indebtedness maturing on October 1, 1950.

The Secretary also announced that institutional investors of the classes defined in Department Circular No. 814, dated September 22, 1947, will be permitted to purchase United States savings bonds of series F and G in amounts in excess of the existing limitations during the following periods:

- (a) From October 2 through October 10, 1950, for bonds dated October 1, 1950;
- (b) From November 1 through November 10, 1950, for bonds dated November 1, 1950; and
- (c) From December 1 through December 11, 1950, for bonds dated December 1, 1950.

Purchases in excess of existing limitations will not be permitted at other times during the remainder of this calendar year.

The Secretary stated that the present offering is designed to attract new money accruing in the hands of institutional investors during the last quarter of the calendar year; and that this offering is in line with his statement of September 5, 1947, when he announced the offering of the Treasury bonds, investment series A-1965, in which he said that "further offerings of securities suitable primarily for institutional investment needs will be made available whenever the situation warrants such action."

The special offering of series F and G bonds will be open to institutional investors holding savings, insurance, and pension funds, which were eligible to purchase the 2½ percent Treasury bonds, investment series A-1965, under Department Circular No. 814, dated September 22, 1947, subject to the following limitations:

- (a) Each investor in the following categories will be permitted to purchase series F and G savings bonds combined up to a total amount of \$1,000,000 (issue



price) for the calendar year 1950 in addition to any bonds which may be purchased under the existing limit of \$100,000 provided that any bonds in excess of the existing limit are purchased during the periods from October 2 through October 10, 1950, inclusive; November 1 through November 10, 1950, inclusive; and December 1 through December 11, 1950, inclusive:

1. Insurance companies
2. Savings banks
3. Savings and loan associations and building and loan associations, and co-operative banks
4. Pension and retirement funds, including those of the Federal, State, and local governments
5. Fraternal benefit associations
6. Endowment funds
7. Credit unions.

(b) Each commercial and industrial bank holding savings deposits or issuing time certificates of deposit in the names of (1) individuals and (2) corporations, associations, and other organizations not operated for profit, will be permitted to purchase F and G savings bonds combined up to an aggregate of \$100,000 (issue price) during the periods set forth above.

Further details with respect to these offerings will be announced later.

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[S-2426. Immediate release, Monday, August 21, 1950]

TREASURY DEPARTMENT INFORMATION SERVICE

STATEMENT BY JOHN W. SNYDER, SECRETARY OF THE TREASURY

Friday's announcement of the refunding of the September and October maturities and the extension of the purchase limitations on series F and G bonds was one more step in the debt management program which the Treasury has followed since the first of the year. Developments in the Government bond market have repercussions which fan out through the entire economy. Both the present size and the wide distribution of the Federal debt are unprecedented in comparison with what faced us at other periods of international crisis. 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. A stable and confident situation in the market for Federal securities is our first line of defense on the financial front.

The debt management program which the Treasury has followed since the first of the year has been fashioned to meet the requirements of the economy. During the first 6 months of this year, Government securities held by the commercial banking system declined \$1.7 billion, while the holdings of private nonbank investors increased \$3.4 billion. The decline in bank holdings was accounted for by a \$1.1 billion decline in holdings of commercial banks and a decline of \$553 million in the holdings of Federal Reserve banks. From the data now available, it is apparent that this trend was continued in July. Holdings of weekly reporting member banks declined by \$656 million in the 4 weeks ended August 2 and holdings of the Federal Reserve banks declined \$362 million from June 30 through July 31.

The private nonbank investors who have been the primary buyers of marketable Government securities have been principally industrial, commercial, and mercantile corporations, State and foreign accounts. They have been buying short-term securities mainly. Another part of the increase in the holdings of private nonbank investors is due to the purchases of individuals—substantially in the form of savings bonds. Longer-term institutional investors, such as insurance companies and savings banks, however, have not been acquiring Government securities on net balance. Instead they have been buying corporate bonds and home mortgages. They have been providing the funds necessary for new housing construction and new plant and equipment for industry. It is now expected that institutional investors may have some funds available for investment in Government securities during the last quarter of the year. For this reason, the Treasury Department has lifted the limits on series F and G savings bonds to absorb these funds as they accrue.

## APPENDIX D

## 1. EXCERPTS FROM AN ADDRESS BY SECRETARY SNYDER BEFORE A LUNCHEON MEETING OF THE NEW YORK BOARD OF TRADE, JANUARY 18, 1951

## FINANCIAL MOBILIZATION

\* \* \* \* \*

Without question a most effective over-all fiscal measure for avoiding the evils of deficit financing, and thereby combating an inflationary spiral in prices is a revenue system which enables the Government to pay its current bills out of current income. No one welcomes heavy taxes. But in a time of unprecedented national danger like the present, I am certain that all groups of our population will soon realize that very much higher taxes—for themselves, as well as for others—are a necessary defense measure.

While adequate revenues are an essential safeguard against the development of inflationary tendencies, they cannot do the job alone. Measures for allocating essential materials have been adopted in order to assure priority for our military needs without increasing the strain on the price structure. Selective credit controls such as those embodied in the Defense Production Act passed by the Congress last July are also of definite help. Other measures of demonstrated effectiveness in curbing inflationary tendencies, such as price and wage controls, are under consideration and will assuredly be adopted soon.

You will note that I have not included the use of fractional increases in interest rates on Government securities as one of the measures of effectively controlling inflation. The Treasury is convinced that there is no tangible evidence that a policy of credit rationing by means of small increases in the interest rates on Government borrowed funds has had a real or genuine effect in cutting down the volume of private borrowing and in retarding inflationary pressures. The delusion that fractional changes in interest rates can be effective in fighting inflation must be dispelled from our minds.

In the absence of new legislation, the Federal deficit will amount to \$16.5 billion in the fiscal year 1952.

This deficit is a result largely of our defense requirements. In nondefense spending, as the President has noted, the only major new public works projects included in the budget are those directly necessary to the defense effort. Construction of many public-works projects now under way has been substantially curtailed. Many other activities have been abbreviated.

The revenue requirements which the defense situation demands need no comment. These requirements can be met without damage to the economy if our citizens have mutual willingness to make the necessary sacrifices.

Along with adequate revenues and specific controls required for curbing price and wage rises, there is a weapon of great importance available to us for keeping inflationary forces under control. That is a debt-management program which is directed toward placing the largest possible proportion of Federal securities in the hands of nonbank investors—individuals, insurance companies, mutual savings banks, and other investors outside the banking system—and reducing the proportion of Federal securities held by commercial banks and Federal Reserve banks.

This program is a powerful weapon in combating inflation. There seems to be a lack of sufficient public knowledge or understanding of what the Treasury has achieved in this area during the postwar period. It should be pointed out, therefore, that as a result of specific Treasury debt management policies, holdings of Government securities by private nonbank investors have increased substantially since the end of the war, and have reached an all-time peak during the last half of the calendar year 1950. This activity has been accompanied by a decline in the holdings of the commercial banking system, which reached new postwar lows during the last half of 1950. Three years ago the public debt was the same as it is now. But the Government security holdings of the commercial banking system have dropped nearly \$10 billion; and approximately \$4 billion of this reduction took place during 1950.

The importance of this anti-inflationary accomplishment cannot be overestimated. This reduction in the money supply of the country holds particular significance at the present time when it is vitally important to the well-being of the economy that the inflationary potential of commercial bank assets be kept at a minimum.

There are two other important matters relating to debt-management policy which hold particular interest at the present time and which have been given

extensive consideration in the financial community and elsewhere in recent months. The first is the place of savings bonds in the Government financing picture, and the actions that will be taken to refund maturing "E" bonds. The second is the rate of interest that the Treasury is going to pay on long-term Government bonds in refunding and new borrowing programs. I want to take up each of these two questions in turn.

A moment ago, I stated that an important anti-inflationary action could be accomplished by placing the largest possible proportion of Federal securities in the hands of nonbank investors. As part of the Treasury Department's endeavor toward this end, the savings-bond program has been of outstanding value. It has been both dramatic and effective. It has been dramatic because it is sustained on practically a volunteer service basis. It has been effective because today, the total of outstanding savings bonds represents approximately 25 percent of the entire Federal debt.

It is really inspiring to know that there are about \$10 billion more savings bonds outstanding today than there were at the end of World War II financing. The tremendous selling program involved in achieving this remarkable record is due in the main part to the volunteer efforts of individuals, business groups, and all organizations who have contributed time, money, and ingenuity to the promotion and sale of savings bonds.

There are only about 500 paid employees in the Savings Bond Division of the Treasury. These employees plan and coordinate the program. The real volume of the work, however, is done through the generous efforts of those volunteers who have sold savings bonds to over 85,000,000 purchasers.

Of the \$58 billion total of outstanding savings bonds, nearly \$35 billion is in "E" bonds. This is a noteworthy accomplishment—for no one would have been rash enough to predict at the end of World War II hostilities that 5 years later there would be a \$4 billion increase in the total of outstanding "E" bonds. Most of us were sure in 1945 that there would be a heavy cashing of savings bonds as soon as war scarcities and restrictions were over. On the contrary, however, the "E" bond total has gone up every year because of the organized promotion by volunteers in bringing the merits of the savings-bond investment to the attention of the public. As a matter of fact, in the calendar year just ended, the volume of "E" bonds outstanding rose by three-quarters of a billion dollars, notwithstanding the fact that there were increases in redemptions as a result of the scare buying immediately following the outbreak of the Korean crisis. It is interesting to observe in this connection that the redemption of "E" bonds—in relation to the amount outstanding—was less percentagewise than other comparable forms of savings. So it becomes readily apparent that the savings bond is, in fact, a very popular form of savings.

It was this last fact that led to the conclusion on our part, after consulting with many individuals and business groups, that the Treasury should continue the savings-bond program after World War II as a major effort to encourage the promotion of thrift. It is this same conclusion that leads us to announce that the Treasury will continue to offer the "E" bond, in its present form, to the public as a Defense bond during the mobilization period. The aim now is not only to promote thrift, but to act as an anti-inflationary force and to help further distribution of the ownership of the public debt.

As you know, beginning in May of this year, a portion of the savings bonds bought during the war years will mature. While some of the holders of these bonds may desire to cash them upon maturity, it is our belief that the majority will desire to continue their investment in United States savings bonds. Therefore, the Treasury is adopting the following plan for handling the maturing bonds. The holder may have his choice of (1) accepting cash if he so desires; (2) continuing to hold the present bond with an automatic interest-bearing extension; and (3) exchange his bond for a current income savings bond of series G.

Under option 2, the bond would be automatically extended, bearing interest at the rate of 2½ percent for the first 7½ years and interest at a rate sufficient thereafter so that the aggregate return for the 10-year extension period will be 2.9 percent compounded. The term of the extension would be limited to 10 years after maturity. The existing option of paying taxes on interest on series E bonds currently or at maturity would be retained. Necessary congressional legislation to authorize this option will be requested immediately. Once the plan is placed in effect, it will apply to all outstanding "E" bonds as they mature, and will apply by right of contract to all new series E savings bonds that are issued.

Now let us go on to the subject of interest rates. It is my view that a 2½-percent rate of interest on long-term Treasury bonds is a fair and equitable rate—to our Government which is borrowing the money, to the purchaser of Government bonds who is lending the money, and to the taxpayer who has to pay the interest on the money borrowed.

The 2½ percent rate of interest on long-term Government securities is an integral part of the financial structure of our country. During the past 10 years—a period in which we fought our most costly war and made a most extensive reconversion to peacetime activities—the 2½ percent rate has become a most important influencing factor in financial policy in the country. It dominates the bond markets—Government, corporate, and municipal. Moreover, it dominates the operations of financial institutions. Most of these have already adjusted themselves to the 2½ percent rate—and after so doing, have become more prosperous than ever before.

Most life-insurance companies, for example, have changed the guaranteed interest provisions of their new policies during the past decade to conform with the 2½ percent rate, so that today about 85 percent of the new life-insurance premiums received by insurance companies are on policies written at interest rates of 2½ percent or less. Mutual savings banks also have tied their current interest rate on funds of depositors to the Government rate.

Any increase in the 2½ percent rate would, I am firmly convinced, seriously upset the existing security markets—Government, corporate, and municipal.

We cannot allow this to happen in a time of impending crisis, with the heavy mobilization program to finance. We cannot afford the questionable luxury of tinkering with a market as delicately balanced as the Government security market. Now is no time for experimentation.

We have not hesitated to draft our youths for service on the battle front, regardless of the personal sacrifice that might be entailed. Neither can we hesitate to marshal the financial resources of this country to the support of the mobilization program on a basis that might, in some instances, require a degree of profit sacrifices.

In the firm belief, after long consideration, that the 2½ percent long-term rate is fair and equitable to the investor, and that market stability is essential, the Treasury Department has concluded, after a joint conference with President Truman and Chairman McCabe of the Federal Reserve Board, that the refunding and new money issues will be financed within the pattern of that rate.

When I came to the Treasury in June 1946, the war had been over less than a year, and war financing had only recently been completed. I felt at that time that stability in the Government bond market during the transition period was of vital importance. As the economy became more stabilized, the Treasury used more flexibility in its debt management program by allowing short-term rates to increase gradually.

Later, beginning with the crisis in Korea, however, the considerations calling for stability in the Government-bond market became tremendously important. The credit of the United States Government has become the keystone upon which rests the economic structure of the world. Stability in our Government securities is essential.

I do not think that we can exaggerate when we emphasize these matters. I think they are basic to our national survival.

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## 2. LETTER FROM THE GENERAL COUNSEL OF THE TREASURY

NOVEMBER 22, 1950.

MR. GROVER W. ENSLEY,  
Acting Staff Director, Joint Committee on the Economic Report,  
United States Senate, Washington, D. C.

DEAR MR. ENSLEY: This is in reply to your request for Treasury comments and suggestions on the first draft of the study on Monetary Policy and Economic Mobilization, prepared for the Joint Committee on the Economic Report by the committee staff. The study, we note, was prepared in response to Senator O'Mahoney's request that the staff assemble "basic facts with respect to recent changes in short-term interest rates and their effects upon business borrowing, commercial credit, cost of Government borrowing, debt management, and inflation."

The Treasury is glad to have the opportunity to review and comment upon this study and I am transmitting to you for your consideration certain basic facts

which either are omitted from your study or which, in our opinion, have not been given sufficient weight. We realize that some of the facts have been omitted because they have not been available to you.

First, it is of utmost importance—and we feel should be brought out more strongly—that the actions of the Treasury and the Federal Reserve System were undertaken at a time when the Nation was in the midst of a serious international crisis.

Second, actions by the Treasury and the Federal Reserve cannot ignore the tremendous changes in the financial structure of the country which have been brought about by the increase in magnitude and relative importance of the public debt as a result of financing World War II. At the end of the fiscal year 1940, the public debt amounted to less than \$50 billion and comprised less than one-fourth of the total debt of the country—public and private. At the present time the public debt amounts to over \$250 billion and comprises approximately one-half of the total debt of the country. The public debt is the predominant factor in the financial structure of our Nation at the present time. It constitutes a large portion of the assets of all of the major investor classes of the country, and operations affecting the debt have repercussions which are felt throughout every sector of the economy. The use of "traditional" monetary weapons in the "traditional" manner has to be evaluated in the light of the changed economic and financial environment.

Third, Secretary Snyder advised the Open Market Committee on June 26 of his firm conviction that everything possible should be done to maintain a basically strong position in the Government-bond market during the period of international disturbance; the Secretary's position was developed further in a letter to Chairman McCabe, dated July 17, a copy of which is enclosed. The position taken by Secretary Snyder does not mean that he is an advocate of inflexible interest rates. He has, in the past, recognized the desirability of flexibility in interest rate policies; and, as you know, short-term interest rates on Government securities have risen considerably since mid-1947. Before the August 18 financing announcement, the rate on the longest Treasury bill, for example, had risen from three-eighths of 1 percent to 1.18 percent (bid); while the rate on securities having maturities of approximately 1 year had risen from seven-eighths of 1 percent to 1.24 percent. But in the situation which has existed since Korea, the Secretary felt that stability was definitely called for at the present time.

Fourth, the August 18 offering of 1¼ percent, 13-month notes by the Secretary of the Treasury was made with the approval of the President of the United States. This is in accordance with the provisions of the laws of the United States—which require that the President approve each issue of United States Government securities maturing in more than 1 year before the offering of such securities can lawfully be made to the public.

Fifth, throughout the study it is implied that Secretary Snyder has been less concerned with controlling inflationary pressures than with the cost to the Treasury of a rise in interest rates. Secretary Snyder was among the first to recognize the inflationary implications of the Korean crisis and has been in the forefront of the efforts to control inflationary pressures. As early as July 5, in testimony before the Senate Finance Committee, he warned Congress that if we were confronted with a substantial increase in defense expenditures it would be necessary to gear changes in the revenue laws to the needs of our economy. It was at Secretary Snyder's request that the Senate, on July 12, decided to shelve the tax-reduction bill which had been under consideration, in order to make way for the consideration of new tax measures which would bring in the increased revenues made necessary by the Korean situation. The Defense Production Act of 1950, which incorporates the President's anti-inflation program, has had the wholehearted support of the Secretary. The implication, therefore, in the study that Secretary Snyder was more concerned about the cost to the Treasury of a rise in interest rates than with controlling inflationary pressures, when he made the August 18 financing announcement, does not square with the facts. On the other hand, the Secretary is firmly opposed to the use of ineffectual methods of inflation control—such as small fractional increases in short-term interest rates—which hold the possibility of impairing confidence in the credit of the United States Government.

Sixth, the financial policies of the Government have provided a successful record of debt management, the importance of which must not be overlooked. Ownership figures indicate that, during the calendar year 1950, private nonbank investors will add about \$5,000,000,000 to their holdings of Government securities—primarily through purchases of short-term marketable securities and savings notes by corporations. Private nonbank holdings of Government securities at the

end of the year will reach an all-time peak. On the other hand, the Government security holdings of the commercial banking system will decline approximately \$5,000,000,000 during the calendar year 1950, reaching a new postwar low. This followed on previous declines in bank holdings of Government securities in recent years. For the 3-year period ending December 31, 1950, the decline will be nearly \$11,000,000,000. This anti-inflationary movement in the ownership of the public debt has not come about accidentally. It has been one of the important objectives of the debt-management policy of the Treasury. It has come about because the Treasury has studied the investment position of the various investor classes carefully; and has offered securities designed to meet the needs of the economy.

As you know, the Secretary of the Treasury attends the meetings of the National Security Council. He has, therefore, an intimate knowledge of the defense situation and what it might involve in the way of Treasury financing which is not available to the Federal Reserve. With the possibilities of the serious international situation in mind, Secretary Snyder felt that it was of paramount importance that no uneasiness about the management of the public debt should occur; and that actions which would unsettle the Government security market when the debt amounts to over \$250,000,000,000, and when its successful management is no simple matter, might have serious results in our successful prosecution of the defense effort. Secretary Snyder made this clear in his August 21 statement when he said:

"\* \* \* Developments in the Government-bond market have repercussions which fan out through the entire economy. Both the present size and the wide distribution of the Federal debt are unprecedented in comparison with what faced us at other periods of international crisis. 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. A stable and confident situation in the market for Federal securities is our first line of defense on the financial front."

The Federal Reserve ignored the Secretary's request for a stable Government security market. Charts 1, 2, and 3 show how rapidly the operations of the Federal Reserve System ran up the yields (ran down the prices) of Government securities, commencing on August 21, and the unsettled state of the market since that time.

It seems to us that, in the interests of keeping the facts straight, the study should note that the September-October refunding issues were approved by the President and announced by the Secretary on Friday, August 18, before the Board of Governors of the Federal Reserve System made its announcement. Also, the study should note that the issues which the Secretary offered were priced in line with the market on the day of the announcement, as shown in chart 4. Chart 1—previously referred to—shows that it was not until Monday, August 21, after the Open Market Committee engaged in open-market operations designed to raise the yields on short-term Government securities, that issues of this type went to a discount.

Finally, in connection with the material in the study analyzing loans of weekly reporting member banks, we think you will find chart 5, "Trend of Bank Loans," helpful in clarifying the picture that is presented in the study. It is, for example, of some significance that the upward trend of bank loans has continued; and that, in fact, the increase in commercial, industrial, and agricultural loans of weekly reporting member banks since August 18 has been three times as large as in the comparable period last year. In this connection, there is also enclosed a table which compares bank loans outstanding and the 1-year market rate on Government securities from June 28, 1950, to the latest date available.

The above facts will, we believe, add to the factual presentation requested by Senator O'Mahoney. I am also transmitting to you with this letter some detailed comments that we have prepared on the study, which you may wish to consider before presenting the study to the joint committee.

Very truly yours,

THOMAS J. LYNCH,  
General Counsel.

THE SECRETARY OF THE TREASURY,  
Washington, July 17, 1950.

HON. THOMAS B. McCABE,  
*Chairman, Board of Governors of the Federal Reserve System,  
Washington, D. C.*

DEAR TOM: 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 July 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 3 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 cannot 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 recommended that the Congress postpone action on the tax 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

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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.

Sincerely yours,

JOHN W. SNYDER,  
Secretary of the Treasury.

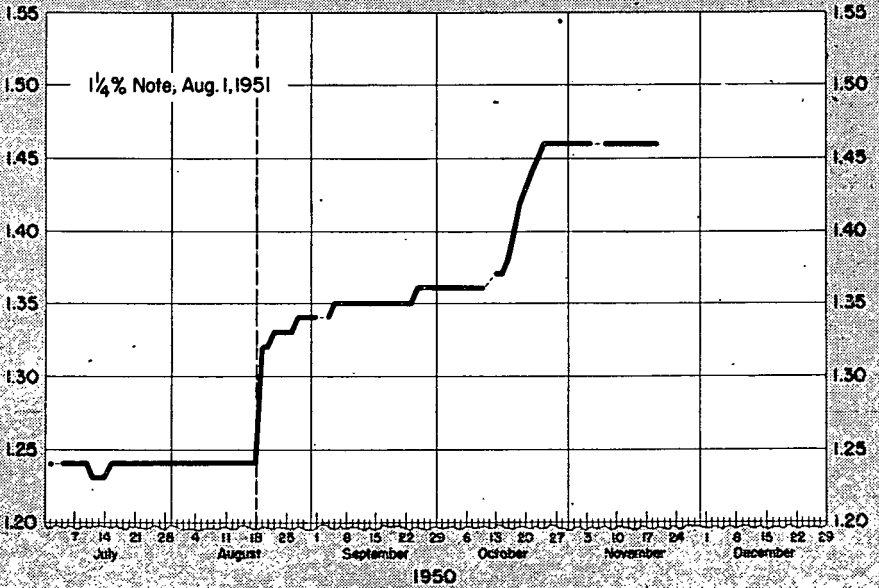
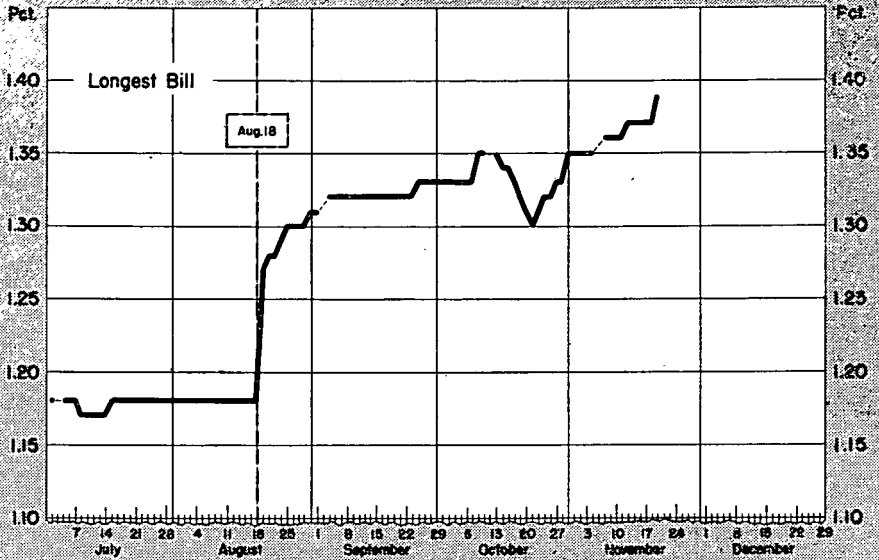
Comparison of bank loans and the 1-year market rate on governments, June 28 to Nov. 21, 1950

	Bank loans outstanding <sup>1</sup>	1-year market rate		Bank loans outstanding <sup>1</sup>	1-year market rate
		Percent			Percent
June 28 .....	\$13,602,000	1.24	Sept. 6 .....	\$14,932,000	1.34
July 5 .....	13,660,000	1.24	13 .....	15,330,000	1.33
12 .....	13,725,000	1.23	20 .....	15,517,000	1.35
19 .....	13,791,000	1.24	27 .....	15,725,000	1.37
26 .....	13,911,000	1.24	Oct. 4 .....	15,915,000	1.37
Aug. 2 .....	14,022,000	1.24	11 .....	16,142,000	1.37
9 .....	14,187,000	1.24	18 .....	16,147,000	1.41
16 .....	14,359,000	1.24	25 .....	16,322,000	1.48
18 .....		1.24	Nov. 1 .....	16,523,000	1.49
21 .....		1.32	8 .....	16,710,000	1.49
23 .....	14,512,000	1.33	15 .....	16,947,000	1.49
30 .....	14,739,000	1.34	21 .....		1.49

<sup>1</sup> Commercial, industrial, and agricultural loans of weekly reporting member banks.

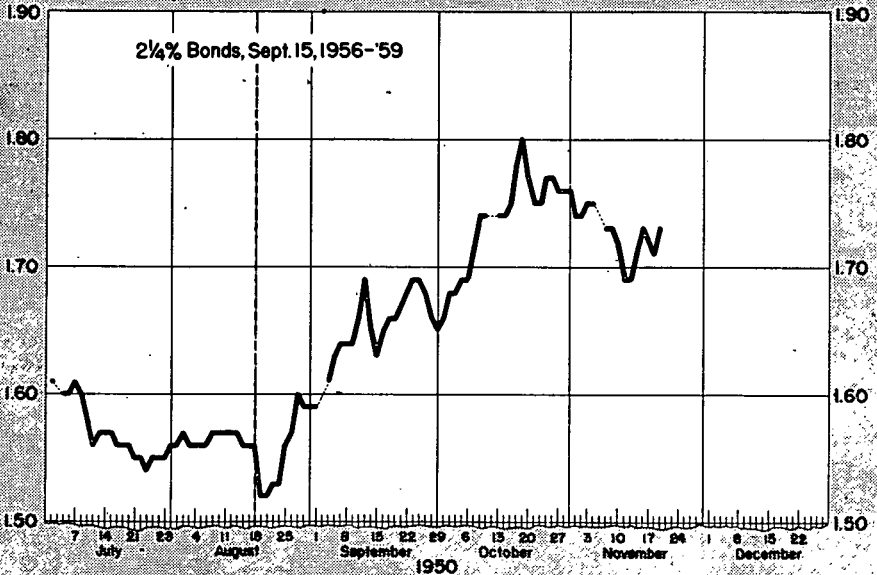


### THE SHORT-TERM GOVERNMENT SECURITY MARKET Yields, July 1, 1950 to Date



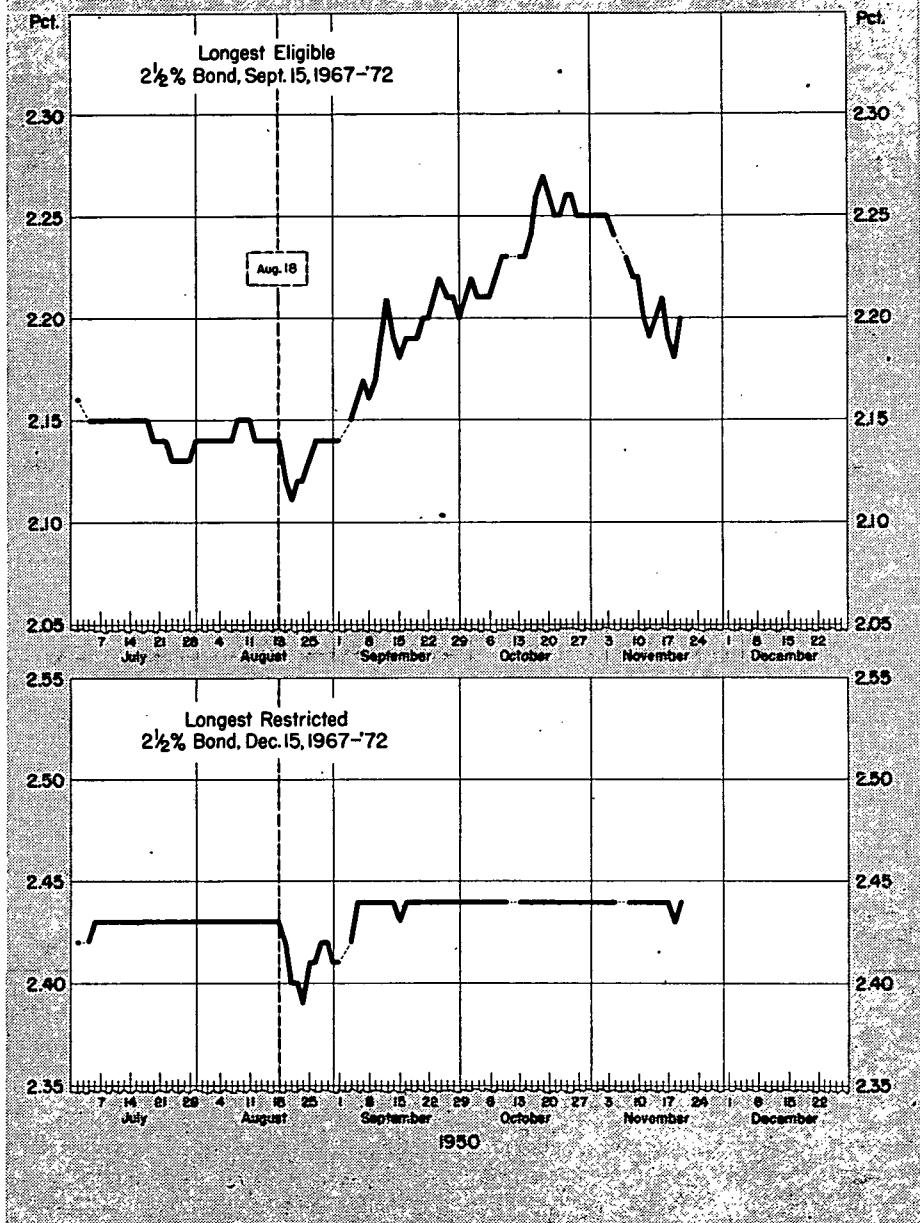
### THE MEDIUM-TERM GOVERNMENT SECURITY MARKET

Yields, July 1, 1950 to Date

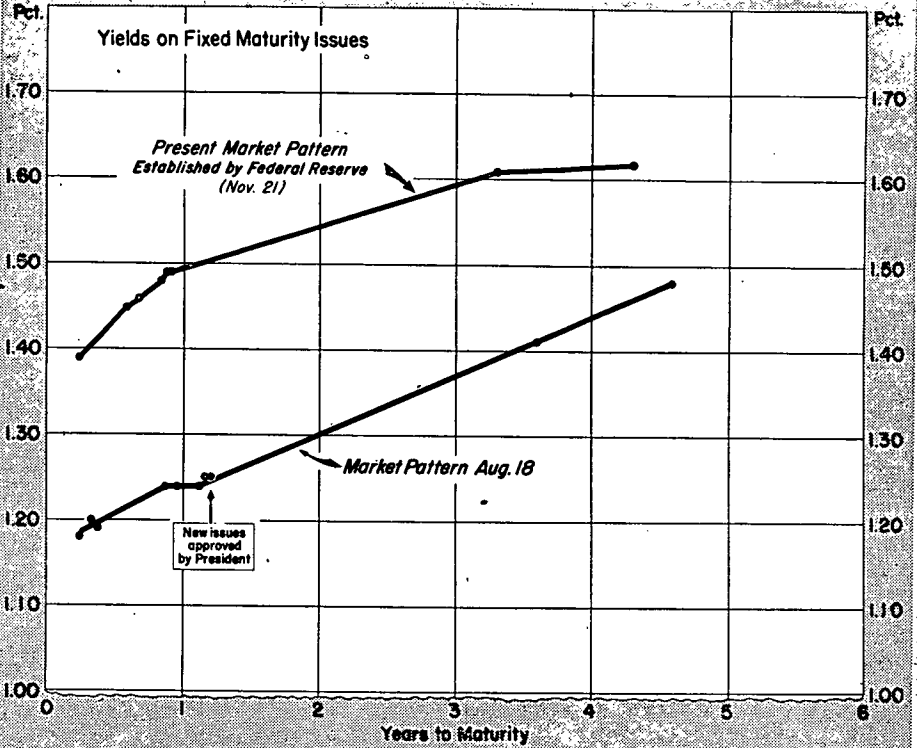


1950

### THE LONG-TERM GOVERNMENT SECURITY MARKET Yields, July 1, 1950 to Date



### COMPARISON OF INTEREST RATE PATTERNS IN THE GOVERNMENT SECURITY MARKET, AUG. 18 AND NOV. 21, 1950

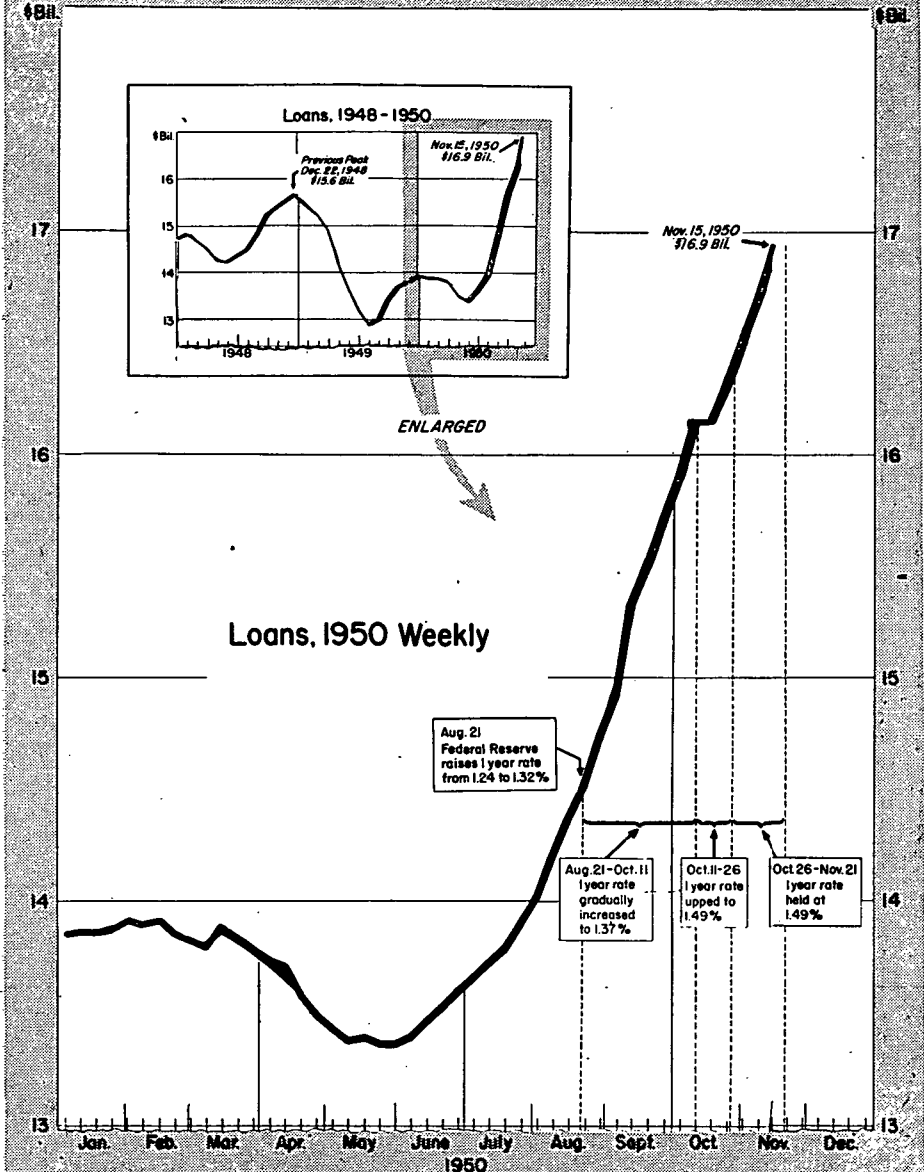


#### ANALYSIS OF THE PUBLIC DEBT OUTSTANDING

Issues most directly affected by rate changes  
in the short and medium term market:

Bills -----	\$14 Billion
Certificates and notes -----	42
Bonds (under 6 years) -----	42
Savings notes -----	9
Total -----	<u>\$107 Billion</u>
All other issues -----	150
Total debt -----	<u>\$257 Billion</u>

TREND OF BANK LOANS\*



\*Commercial, industrial, and agricultural loans of weekly reporting member banks

## APPENDIX E

EXECUTIVE OFFICE OF THE PRESIDENT,  
COUNCIL OF ECONOMIC ADVISERS,  
November 20, 1950.

HON. JOSEPH C. O'MAHONEY,  
*Chairman, Joint Committee on the Economic Report,  
Senate Office Building, Washington, D. C.*

DEAR MR. CHAIRMAN: Through the kind consideration of Mr. Lehman, the clerk of the joint committee, we have received the report of its staff entitled "Monetary Policy and Economic Mobilization," and a request for the comment and views of the members of the Council of Economic Advisers thereon. Because he is out of the city, until after the deadline set for our response, Mr. Blough has not been able to participate in the preparation of this reply.

Our approach to the problem of monetary policy has never been limited to the consideration of the immediate effects of a specific measure in curbing inflationary forces or in counteracting a deflationary movement. Under the Employment Act of 1946, our responsibility, which the joint committee particularly will appreciate, is to work with others toward the coordination of all of the plans, functions, and resources of the Federal Government to promote maximum employment, production, and purchasing power on a sustained basis. The specific mandate of the Council is to appraise all of the various policies and activities of Government in the light of this principle of the Employment Act and to make recommendations to the President.

Monetary policy is one of these policies. It cannot be considered apart from all others but must be integrated with them in the effort to influence, through Government programs, our enormous and complex economy, and to maintain it on the course leading to the goal of the Employment Act.

Our broader point of view was presented to the joint committee in February 1950, in a special report which you requested for inclusion in the hearings upon the January 1950 Economic Report of the President. We were then discussing the monetary policy which might be appropriate if an inflationary movement were to develop under peacetime conditions. Accepting the principle that in the long run the basic solution to the shortages which initiate or aggravate inflation is to increase the supply of goods, we made these points:

1. That a vital requirement is that the credit of the Government be preserved against doubts, and that the confidence of present holders of Government bonds and of potential investors must not be shaken by the sight of falling market prices induced by raises in interest rates through Federal Reserve action. The increase in the interest burden forced upon the Treasury as it refunds billions of maturing securities or as it issues new bonds when deficit financing is required is not the principal vice of this kind of monetary policy. We are not even greatly concerned that the increasing of interest rates increases the profits of bondholders and raises the price charged by bankers and investors for what they sell (credit) at a time when everyone else is being urged to hold down his prices and profits. The greater damage to our fiscal program lies in the fact that at a time when there would be no difficulty in supporting the Government bond market at a level permitting new issues at no change in interest rates, the price of the outstanding securities is lowered, the Government bond market is shaken, and doubts arise which if not quieted could impair the Government credit. This kind of monetary policy, at a time when the existing pattern of interest rates could easily be supported, is not justified in our opinion if its positive contribution to an anti-inflation program is as dubious and as imponderable as advocates of the policy say it is, particularly when other measures are available which act more positively and which have fewer undesirable consequences.

2. That a plan to dampen inflationary forces by increasing interest rates means to increase the cost of new capital to most borrowers indiscriminately, and to jeopardize new investment in basic productive facilities at a rate which should be encouraged rather than impeded under current conditions. Unlike selective controls, which may be directed at the very point where restraint should be imposed, the maneuvers of the central bank to manipulate interest rates affect the businessman who plans to expand his plant and facilities along lines of national need as well as the firm which wishes to speculate in large inventories. Indeed, higher interest rates are more apt to discourage worth-while new investment, which is conservatively planned, than to dampen the more speculative projects. This aspect of monetary policy has now assumed major importance, but even

in the less urgent circumstances of a peacetime inflation, as we said in our February report, it raises a challenge to the policy of increasing interest rates.

3. That preferable measures, such as the tightening of credit on a selective basis need not involve increasing the cost of new capital to businessmen whose projects should be encouraged. Even though such tighter credit would mean that some desirable economic expansion would be impeded, the contribution of such a measure to the anti-inflationary program might be substantial enough to make it desirable during a temporary inflation. This judgment led the Council, as we mentioned in the February 1950 report, to support the proposal of the Federal Reserve Board in 1947 for a special bank reserve requirement, and we have continued to recommend legislation for this purpose in order that the Board might always have this power to use when need arose. For reasons which we present later, we do not believe that the power, if granted, should be used under present circumstances.

Such were our general views last February.

However, the inflationary problem has now assumed a very different guise from that we were considering last February, and this calls for a reconsideration. We are not dealing with a temporary situation, but with inflationary pressures arising from a Government program of very large defense expenditures which for years to come will require the extensive diversion of production from civilian demand to Government purposes. Economic stabilization under such conditions will never come until production has been enlarged impressively; and every measure proposed to curb inflation must be evaluated far more critically than in peacetime in the light of its effect in impeding the expansion of productive capacity. The process of evaluation will be but little aided by old formulas and concepts. No policy has ever been tested in the environment in which we move today.

The staff of the joint committee has done well to emphasize this feature of the pattern within which the proposed hearings should proceed. Monetary policy cannot be considered solely from the standpoint of its anti-inflationary effect. Yet it is very seldom that in any article, statement, or address by an advocate of traditional anti-inflationary action by the central bank is there any reference to the need to encourage economic expansion. But when the same experts discuss anything except monetary policy, they often match the vigor of the Council of Economic Advisers in asserting that every policy must be devised with expansion in view. An example is an editorial in *Business Week*, November 18, 1950, in which it is said:

"Production rather than regulation is the solution to our problems. Our national economy is strong because it's active and growing. It won't be made stronger by putting handcuffs on it. \* \* \* We must convince Washington that peril lies in reliance on controls and cut-backs. The answer to our problem still is production and more production. • To get that, we need to keep on expanding our capacity. For only by industrial expansion to meet all needs fully can we prevent one control begetting another and another and another until the whole economy is throttled."

We believe the proposed hearings of the joint committee will be most productive, if the focus is the role which should be played by the banking system of the country in the long effort to expand national production until it supplies the goods and services required by the defense program and at the same time meets the market demands of industry and consumers. The expansion of bank credit in recent months is treated as an unmixed evil in the communications from experts which are attached to the staff report. No one notes the heartening fact that the industrial production index was increasing from 196 in July to 212 in October. If we want industrial production to expand, we should not bewail without qualification the financial changes which inevitably accompany the process.

Our banking system is a vital part of the machinery of economic activity, and only in a temporary emergency should it be prevented from performing its function as the source of business credit and of new capital for economic expansion. The tightening of bank credit, as by increasing reserve requirements, has effect as a curb of inflationary forces only if it causes the banker to refuse loans which he would otherwise find desirable and prudent. The increasing of interest rates, if it restricts bank credit, does so by causing the businessman to desist, on account of capital cost, from a business program which he and his banker would have approved as prudent and desirable. Neither method of limiting bank credit should now be used. They are not consistent with genuine economic expansion.

Our stress upon economic expansion should not be misconstrued as lack of recognition that some kinds of expansion, in commercial as well as consumer activity, must be delayed and retarded on the basis of the defense program.

Further, even the achievement of necessary basic expansion in some areas will require materials and manpower which can be made available quickly only through restrictions elsewhere. Nonetheless, the net objective for the economy as a whole, and particularly for the industrial sector, must be constant expansion at the highest feasible rate. There is no other way to meet the tremendous burdens of a defense program for an indefinite number of years without disorganization and ultimate loss of our great economic power.

Selective controls are available which not only apply restraint at the very points of economic activity which may well be dampened, but which also act more positively and effectively than do general credit controls.

The aggressive use by the Federal Reserve Board of its power to regulate consumer credit and to regulate credit for new housing meets the requirements of what is, in our opinion, a sound policy for the restraint of credit. Monetary policy should not be expected to carry the full burden of anti-inflationary controls, but there are other selective controls, such as the restriction of credit for inventory buying, and the limiting of credit for commodity exchange trading, which can be added to those already in force. If still further types of selective credit restraints prove to be needed, legislation to authorize them should be considered.

In 1948 it was shown that the bankers respond to appeals that they adopt conservative loan policies in a period of inflation. We believe that they will be influenced by the statement just issued by the Chairman of the Federal Reserve Board, particularly because they know that the Board has not exhausted all of the power to control credit selectively which has recently been used effectively in regulations W and X.

There are many points in the excellent report of the staff of the joint committee and in the interesting communications from experts which require consideration, but which we shall not undertake to discuss at this time. The committee will be especially interested, we believe, in two questions which they raise.

1. What reason is there to believe that any important anti-inflationary pressure will be exerted by an increase in short-term rates, within the very limited range which is possible if it is the policy of the Federal Reserve Board to support the 2½ percent long-term rate?

2. Is it a valid assumption that the alternative we actually face is between permitting destructive inflation or utilizing some power of the central bank to control inflation by raising interest rates?

In considering these questions the committee should note a shift of position by some of those who advocate higher short-term interest rates. The original argument was that higher interest cost discourages the businessman borrower. Now it is that the banker (to use the phrase of one of the experts) is bought off from selling Governments if he is paid more interest and that this will tighten his disposition toward loans if he would have to add to his reserve before he could extend more credit.

The new theory runs into many difficulties when it is set up against the actual financial position and attitudes of bankers. It has now been buttressed by a collateral proposal which requires continued lifting of short-term rates, because its effectiveness disappears whenever the rate is stabilized. In a candid statement before a trade association on November 14, 1950, Lewis H. Brown, from his vantage point as a director of the Federal Reserve Bank of New York, described recent Federal Reserve policy and its rationale. After telling how the banker will make all attractive loans so long as he can secure funds by selling Governments without loss and perhaps at a profit, Mr. Brown said:

"But suppose the Federal Reserve backed away now and then, suppose it said, 'Well, we'll buy the securities, but we won't pay the price you paid for them. We'll just pay a little less than we did last week, and maybe next week the price will be a little lower.' The banker is certainly not going to stop making all loans, and nobody wants him to stop completely.

"But, perhaps, he'll begin to ration them a bit. Perhaps he'll cut out some of the marginal business he's been taking, such as some of the loans to finance speculative accumulation of inventory. If he does, that's as much as could be hoped for; and by just that much the operation works to restrain the expansion of credit."

If this is the meager performance as an anti-inflationary device which can be credited to the policy urged, there is little justification for asserting that our choice is between successfully curbing inflation by increasing interest rates on the one hand, or on the other hand permitting inflation with its evil effects upon defense expenditures because we stabilize interest rates at a low level. Instead of sanctioning a policy which would tend to compel the Treasury to find buyers each week



for a billion dollars of new securities in a financial market which is warned that the market price will immediately fall, the joint committee should seriously consider whether it is not far better to train monetary policy upon the rigorous selective controls of credit, and to look to taxation, allocation powers, and other measures to complete the program.

Very sincerely yours,

LEON H. KEYSERLING, *Chairman.*  
JOHN D. CLARK.

## APPENDIX F

EXECUTIVE OFFICE OF THE PRESIDENT,  
COUNCIL OF ECONOMIC ADVISERS  
*Washington 25, D. C., November 25, 1950.*

Mr. GROVER W. ENSLEY,  
*Associate Staff Director, Joint Committee on the Economic Report,  
United States Capitol, Washington 25, D. C.*

DEAR MR. ENSLEY: The letter of Mr. Lehman, clerk of the joint committee, inviting comments and suggestions regarding the study of your staff on Monetary Policy and Economic Stabilization has been brought to my attention. I congratulate you and the staff on this study, which opens up the problem of the relation of monetary policy to economic mobilization in a very helpful manner. I am pleased to see the proposals made in the study for early hearings by the joint committee "to evaluate the workings of our current monetary and credit programs and consider the appropriate reconciliation of these and debt management programs." Your emphasis on studying extension of selective controls, new public debt instruments, the possible grant of authority to the Federal Reserve to impose additional and special reserve requirements, and the relationship of present price-wage-profit patterns and trends to the success or failure of monetary, credit, and fiscal programs appears to be well placed. These are important subjects on which a great deal more information and analysis would be desirable.

To arrive at sound policy, it is helpful to discover the sources of controversy. Differences of opinion over policy may have various roots. For example, there are undoubtedly differences in the relative importance placed by different persons on such objectives as economic stability, economic expansion, amounts of interest payments in the Federal budget, the credit needs of the banking public, and the profits of banks. It would be helpful if these objectives of monetary and credit policy and any inconsistencies among them could be pointed up more clearly. Perhaps an even more significant contribution would be to throw new light on questions of fact and economic analysis about which there may be little firm evidence to support a diversity of firmly held opinions. Following are some of the questions which seem to be of particular importance in arriving at intelligent policy decisions in the field of monetary and credit policy. Many of these, of course, are implicit if not explicitly set forth in your study. Some may have been adequately covered in previous hearings of the joint committee.

1. How is economic expansion to be achieved at a time when employment is at a high level? What are the limiting factors determining the rate of such economic expansion? Is bank credit a significant limiting factor under prospective conditions? What are the effects on such economic expansion of general bank credit restriction? How do these effects compare with those of tax increases? Are price increases an inevitable result of such economic expansion? Can inflation be prevented while expansion proceeds at a rapid rate? If so, how is this to be achieved?

2. How can credit be restricted in view of the size of the national debt? To what extent do Government securities serve as a substitute for credit? To what extent do changes in the rate of interest affect the demand for different classes of borrowers for loans? The willingness of banks to make loans? Can credit be generally restricted without increasing the rate of interest? Are there any loans, other than those made to finance the purchases of durable consumer goods and houses, which can be identified and to which specific credit controls can be effectively applied? If so, what are they, and how can this control be achieved?

3. Is it possible to tighten credit in the private money market without increasing the rate of interest on Government securities? If so, what devices could be employed to achieve this result? Would an increase in member bank reserve requirements, either of the usual type or a secondary reserve of Government securi-

ties, contribute substantially to this result? What other results would it have which might be undesirable?

It seems likely that much of the controversy over monetary and credit policies arises because of differences in beliefs regarding the answers to the above questions. While it would be too optimistic to assume that these questions could be definitively answered by hearings of the joint committee, I believe that such hearings could throw considerable light on them.

I appreciate this opportunity to make suggestions regarding the excellent report of your staff on this important subject.

Sincerely yours,

ROY BLOUGH, *Member.*

## APPENDIX G

### I. EXCERPT FROM JOINT COMMITTEE HEARINGS, NOVEMBER 25, 1947

#### TESTIMONY OF MR. MARRINER ECCLES

\* \* \* We recommend for consideration, as the best alternative we have been able to devise, that all commercial banks be required as a temporary measure to hold some percentage of their demand and time deposits, in addition to present reserves, in a special reserve in the form of Treasury bills, certificates and notes, or cash, cash items, interbank balances, or balances with Federal Reserve banks.

Such a requirement would be far less onerous for the banking system than any other effective method that has been suggested in the long period in which this problem has been discussed by bankers, by economists, and public officials.

Manifestly, such a requirement would have to be imposed gradually, if at all, as an offset, for example, to bank reserves created by gold acquisitions, and by the purchase of Government securities from nonbank investors, and also to limit the too-ready availability of reserves, now enabling banks to obtain them at will. A multiple expansion of credit can be built on these reserves at a ratio of fully \$6 of lending for every dollar of reserves.

We would propose that the special reserve requirement be limited by law to a maximum of 25 percent on demand, and 10 percent on time deposits.

It should be made applicable to all commercial banks. It would not be effective if applied only to member banks of the Federal Reserve System, and would be an unjustifiable discrimination.

We recognize that this proposal is no panacea, but it would be an important, available restraint, now lacking, to be applied equally to all commercial banks so that the individual banker would be in the same competitive situation he is in today.

\* \* \* \* \*

The proposed special reserve requirement has a number of important advantages over other methods of dealing with the problem of restricting the banks' expansion of credit:

1. The plan would have about the same effect in limiting credit expansion as an increase in primary reserve requirements, which was proposed as the third alternative in the 1945 annual report. It would enable the banks to retain the same volume of earning assets that they now hold, whereas, an increase in basic reserve requirements would make it necessary for them to reduce earning assets, with adverse effects upon the earnings position of banks.

2. The ratio of potential credit expansion on a given increase in reserves would be narrowed to the extent that the special reserve was required. At the maximum requirement proposed, it would be lowered from 6 to 1 to nearly 2½ to 1.

3. It would bring about an increase in interest rates on private debt and would increase earnings of the banks from this source where rates on loans are comparatively low. It would accomplish this purpose, moreover, without increasing the interest cost on the public debt or permitting unstable prices in the Government securities market. The plan, in effect, would divorce the market for private debt from the market for Government securities.

4. The plan would not rely on higher interest rates to restrain private borrowing, but to the extent higher interest rates restrain such borrowing, the proposal would make use of the interest rate mechanism. Hence, the cost of restraining credit would be borne by private borrowers who are incurring additional debt, and not by the Government which is reducing its debt.

5. The main effect of the plan would be to reduce the availability of bank credit. This would be accomplished by putting the restraint on the lenders, that is, the banks. They would be less willing to sell Government securities in order to expand credit because the amount of such liquid assets as they held as secondary reserves could be greatly reduced by the requirements. Such a possibility, even without action being taken by the Reserve authorities, would have a very restraining influence.

6. The plan would restore use of the customary instruments of Reserve influence on bank-credit expansion, namely, discount rates and open-market operations. Support of these instruments by the special reserve requirement would enable the Federal Reserve to make it more difficult and costly for banks to borrow Federal Reserve funds.

7. No alterations in the banking structure, in the authority of the supervisors, in customary methods of bank operations, or in established interbank relationships would be introduced as a result of imposing the requirement.

8. The banks would be left by the plan with sufficient latitude to meet essential needs of the economy for credit, and the public would be assured of a high degree of liquidity and safety for the banking system.

Many bankers argue that this proposed requirement is unnecessary because the banks themselves have a vital interest in the conservative extension of credit, and will prevent excessive credit expansion as a matter of ordinary banking prudence.

The banks, however, are confronted by a situation in which they can readily meet unlimited private credit demands and in which such demands are vigorously sustained by inflation while, at the same time, these demands are contributing to inflation. They are both cause and effect.

The banks are not in a position to refuse legitimate, sound credit demands of individual customers, and current loans, taken separately, which in the light of the customer's satisfactory credit risk do appear to represent legitimate credit needs. But in accommodating these credit demands freely, the banks as a system are expanding bank deposits and adding to the money supply.

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## 2. EXCERPT FROM AN ARTICLE THE DEFENSE OF THE DOLLAR, BY MR. MARRINER ECCLES, FORTUNE MAGAZINE, NOVEMBER 1950

\* \* \* Credit must primarily be controlled at the source of its creation, the banking system. This cannot be done on a basis of voluntary agreements in a competitive business involving 15,000 banks. There must be adequate powers in the Federal Reserve System that will bring about the needed restraint on the part of banks as well as on the part of the borrowers.

The growth of bank credit could no doubt be stopped if banks could obtain additional reserves only by borrowing from the Federal Reserve bank at whatever discount rate was established by the Reserve System. This was the traditional instrument of credit control used by the Federal Reserve until it had to take responsibility during the war for the support of the Government-securities market. Under this policy the System supplies reserves at the will of the market. If the Federal Reserve had complete freedom in its open-market operations, it could refrain from buying securities during inflationary periods and let prices decline until the market is self-supporting. However, because of the huge size and cost of carrying the public debt, with its structure consisting of over \$65,000,000,000 of demand obligations and \$60,000,000,000 of short-term securities, and because of the difficult refunding problem when there are widely fluctuating interest rates the Federal Reserve has not felt free to let short-term security prices decline and rates to rise except within the narrow limits of the pattern set by the 2½ percent rate on long-term Government bonds. Even such minor increases in short-term rates as have recently taken place have been vigorously opposed by the Treasury. Thus the Federal Reserve may have to support the Government market although such action supplies reserves to the banking system and these reserves in turn become the basis for a sixfold expansion of bank credit. This credit adds a like amount to our money supply.

Therefore it appears that supplementary powers to control the reserves of the entire commercial banking system may be needed so that the Federal Reserve System can, if required, immobilize new bank reserves arising from the system's purchases of Government securities in support of the market. Authority is also needed to require all commercial banks to hold a special reserve of adequate size in short-term Government securities or (at their option) a like amount in cash. Such a requirement would greatly deter banks from continuing to sell such securities in order to get reserves for the purpose of expanding private credit. \* \* \*

## APPENDIX H

## COMMUNICATIONS FROM ECONOMISTS

The following comments have been received in response to a request from the joint committee staff for the views of a few leading economists with respect to short-term interest rates, and especially their effects upon business borrowing, commercial credit, costs of Government borrowing, debt management, and upon inflation generally.<sup>1</sup> It was suggested that it might be most useful in connection with the present study if the statements would, as far as practicable, be limited to the specific implications and long-run effects on Government finances and on the stability of the economy in following at this time a policy of allowing interest rates on short-term Treasury issues to rise.

All of the contributors have been most generous in permitting their comments to be quoted in full. They make clear, however, that these statements are not to be identified in any way as being those of the organizations which employ them, but represent solely the views of the contributors as individuals.

PRINCETON UNIVERSITY,  
DEPARTMENT OF ECONOMICS AND SOCIAL INSTITUTIONS,  
*Princeton, N. J., January 12, 1951.*

HON. JOSEPH C. O'MAHONEY,  
*United States Senate, Washington, D. C.*

MY DEAR SENATOR O'MAHONEY: The enclosed statement, signed by over 400 economists at 30 institutions in the first half of December, recommends strong fiscal and credit policies to prevent further inflation. In view of the developments since the statement was drafted, it seems more than ever necessary to emphasize the basic need for such action. I am, therefore, calling the statement to your attention on behalf of those who prepared and signed it.

Sincerely yours,

RICHARD A. LESTER,  
*Professor of Economics.*

## AN ECONOMIST'S STATEMENT ON ANTI-INFLATIONARY MEASURES

The undersigned economists believe that prevention of inflation in the situation created by the expanding defense program requires, as the principal line of defense, a substantial increase in taxation, reductions in expenditures at all governmental levels wherever this can be done without impairing national defense or other essential public services, and a more restrictive credit policy. The basic cause of inflation, an excess of money demand relative to available goods, must be attacked. Only adequate fiscal and monetary measures can remove this basic cause.

With the economy already operating at very high levels, further increases in spending cannot fail to enhance inflationary pressures. Under the influence of the expected increase in defense spending following the Korean outbreak, business and consumer spending has already risen markedly, and price and wage increases are augmenting business and consumer incomes. Yet most of the planned rise of defense spending is still to come, and this further rise will generate additional increases in private money incomes. Large expenditures on military programs and foreign aid, with their inflationary impact, may be needed for a decade or more. Faced with this long-run inflationary prospect, we recommend that the increase in total spending be continuously curbed in three principal ways, and that these constitute the first line of defense against inflation:

1. Scrutinize carefully all Government expenditures and postpone or eliminate those that are not urgent and essential. Substantial reductions can be achieved only if some programs are cut.

2. Raise tax revenues even faster than defense spending grows so as to achieve and maintain a cash surplus. Merely to balance the budget is not enough. If the inflationary pressure is to be removed, taxes must take out of private money incomes not only as much as Government spending contributes to them but also a part of the increase of private incomes resulting from increased private spending

<sup>1</sup> The following persons were also asked to comment, but were unable to reply within the time available: Dr. Howard R. Bowen, University of Illinois; Dr. Richard B. Goode, University of Chicago; Dr. Alvin H. Hansen, Harvard University; Dr. Albert G. Hart, Columbia University; Mr. Everett M. Kassalow, Full Employment Committee—CIO; Dr. Dexter Keezer, McGraw-Hill Publishing Co., Inc.; Dr. Lloyd Metzler, University of Chicago; Dr. Marcus Nadler, New York University; Dr. Howard H. Preston, University of Washington; Mr. Russell Smith, National Farmers Union; and Dr. Arthur Smithies, Harvard University.

of idle balances and newly borrowed money. Larger taxes must be paid by all of us. Reliance should be placed primarily on increases of personal income taxes on all income in excess of present exemptions. Higher corporate profits taxes, in one form or another, are also imperative. In addition, loopholes in our tax laws should be closed.

3. Restrict the amount of credit available to businesses and individuals for purposes not essential to the defense program. An expanding supply of low-cost credit which swells private spending cannot fail to stimulate inflation when the supply of goods available for private use will be difficult to expand and may even decline.

Selective controls over consumer credit, real-estate credit, and loans on securities are useful for this purpose and should be employed. But we believe that general restriction of the total supply of credit is also necessary. This can be accomplished only by measures that will involve some rise of interest rates.

If general inflationary pressure is not removed by fiscal and credit measures, we face two alternatives: (1) Continued price inflation, or (2) a harness of direct controls over the entire economy which, even if successful in holding down prices and wages for a while, would build up a huge inflationary potential in the form of idle cash balances, Government bonds, and other additions to liquidity. Such accumulated savings would undermine the effectiveness of direct controls and produce open inflation when the direct controls are lifted. Everyone remembers vividly the sharp inflation of 1946-48 when the wartime accumulation of liquid assets went to work on prices after the removal of direct price and wage controls. Either of these alternatives is extremely dangerous. A prolonged decline in the purchasing power of the dollar would undermine the very foundations of our society, and an ever-spreading system of direct controls could jeopardize our system of free enterprise and free collective bargaining. For these reasons we urge that fiscal and credit policies constitute our primary defense against inflation.

The best possible fiscal and credit policies, however, will not eliminate altogether the need for other types of restraints. The first impacts of a defense program are felt especially in particular commodities. Effective allocation programs and orders limiting the consumption of short materials to essential uses, and an expansion of supplies can help stabilization of prices and wages in such specific lines; but they cannot of themselves insure price and wage stability. Moreover, it is obvious that stability of the general level of prices in the economy would be impossible in the face of general wage increases that substantially raise costs and private spendable incomes. For the above reasons, voluntary restraints by business and labor are an important ingredient of a successful anti-inflation program, and if business and labor cannot or will not exercise such restraint some mandatory Government ceilings may be necessary.

In sum, fiscal and credit measures are the only adequate primary defense against inflation, and can minimize the extent of direct Government controls over wages, prices, production, and distribution. If adequate fiscal and credit measures are not employed, the country will face the ominous choice between continuous inflation and a prolonged application of widespread Government price and wage controls.

NOVEMBER 30, 1950.

Gardner Ackley, University of Michigan  
 George P. Adams, Jr., Cornell University  
 Leonard W. Adams, Syracuse University  
 E. E. Agger, Rutgers University  
 H. K. Allen, University of Illinois  
 Edward Ames, Amherst College  
 Geo. R. Anderson, University of Michigan  
 Carl Arlt, Oberlin College  
 James L. Athearn, Ohio State University  
 Leonard A. Axe, University of Kansas  
 G. L. Bach, Carnegie Institute of Technology  
 Robert E. Baldwin, Harvard University  
 Paul A. Baran, Stanford University

Russell S. Bauder, University of Missouri  
 William J. Baumol, Princeton University  
 Harry P. Bell, Dartmouth College  
 James Washington Bell, Northwestern University  
 Philip W. Bell, Princeton University  
 Merrill K. Bennett, Stanford University  
 Warren J. Bilkey, University of Connecticut  
 Robert L. Bishop, Massachusetts Institute of Technology  
 John D. Black, Harvard University  
 Perry Bliss, University of Buffalo  
 Francis M. Boddy, University of Minnesota  
 Harold Barger, National Bureau of Economic Research

- George H. Borts, Brown University  
 Chelcie C. Bosland, Brown University  
 K. E. Boulding, University of Michigan  
 Carol P. Brainerd, University of Pennsylvania  
 Elwood J. Braker, University of Pennsylvania  
 Elizabeth Brandeis, University of Wisconsin  
 Alma Bridgman, University of Wisconsin  
 George K. Brinegar, University of Connecticut  
 Ayres Brinser, Harvard University  
 Alexander Brody, City College of New York  
 Martin Bronfenbrenner, University of Wisconsin  
 Robert R. R. Brooks, Williams College  
 Douglass V. Brown, Massachusetts Institute of Technology  
 E. Cary Brown, Massachusetts Institute of Technology  
 Emily C. Brown, Vassar College  
 Harry G. Brown, University of Missouri  
 O. H. Brownlee, University of Minnesota  
 Yale Brozen, Northwestern University  
 Kenneth P. Brundage, University of Connecticut  
 D. H. Buchanan, University of North Carolina  
 Norman S. Buchanan, University of California  
 Edward C. Budd, University of Illinois  
 Henry T. Buechel, University of Washington  
 Robert L. Bunting, University of North Carolina  
 H. H. Burbank, Harvard University  
 Arthur Butler, University of Buffalo  
 John Buttrick, Northwestern University  
 Carl R. Bye, Syracuse University  
 James D. Calderwood, Ohio State University  
 Arnold P. Callery, University of Buffalo  
 Claude A. Campbell, State College of Washington  
 Robert Campbell, University of Illinois  
 Arthur M. Cannon, University of California  
 Helen G. Canoyer, University of Minnesota  
 John P. Carter, University of California  
 W. Harrison Carter, Jr., University of Connecticut  
 William A. Carter, Dartmouth College  
 P. W. Cartwright, University of Washington  
 Lester V. Chandler, Princeton University  
 Frank C. Child, Williams College  
 Jack Chernick, University of Kansas  
 Carl Christ, Johns Hopkins University  
 A. Hamilton Chute, University of Texas  
 Jack Ciaccio, Northwestern University  
 Carl P. Ciosek, University of Connecticut  
 Frank L. Clark, University of Connecticut  
 Paul G. Clark, Williams College  
 G. H. Cochran, Ohio State University  
 John A. Cochran, University of Illinois  
 Sanford Cohen, Ohio State University  
 Joseph D. Conard, Swarthmore College  
 Michael V. Condoide, Ohio State University  
 Paul W. Cook, Northwestern University  
 Alvin E. Coons, Ohio State University  
 Arthur J. Coutu, University of Connecticut  
 James A. Cover, Syracuse University  
 A. B. Cox, University of Texas  
 John M. Crawford, Carnegie Institute of Technology  
 Ira B. Cross, University of California  
 James A. Crutchfield, University of Washington  
 Howard A. Cutler, University of Illinois  
 Stuart Daggett, University of California  
 C. F. Daily, University of Oklahoma  
 Clarence H. Danhof, Princeton University  
 Clyde E. Dankert, Dartmouth College  
 Joseph S. Davis, Stanford University  
 Robert T. Davis, Dartmouth College  
 Malcolm M. Davisson, University of California  
 Melvin G. de Chazeau, Cornell University  
 Karl de Schweinitz, Jr., Northwestern University  
 Emile Despres, Williams College  
 Arthur W. Dewey, University of Connecticut  
 Ralph L. Dewey, Ohio State University  
 Robert L. Dickens, Duke University  
 Z. C. Dickinson, University of Michigan  
 Arthur T. Dietz, Wesleyan University  
 James C. Dolley, University of Texas  
 Duane Doolittle, Syracuse University  
 Boris G. Dressler, City College of New York  
 John F. Due, University of Illinois  
 Acheson J. Duncan, Johns Hopkins University  
 Delbert J. Duncan, University of California  
 Henry L. Duncombe, Dartmouth College  
 James S. Dusenberry, Harvard University  
 J. S. Earley, University of Wisconsin  
 Robert S. Eckley, University of Kansas  
 Melvin A. Eggers, Syracuse University  
 Howard S. Ellis, University of California  
 P. T. Ellsworth, University of Wisconsin  
 Donald English, Cornell University  
 Ralph C. Epstein, University of Buffalo  
 Merton W. Ertel, University of Buffalo

- George Heberton Evans, Jr., Johns Hopkins University  
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 E. D. Fagan, Stanford University  
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 Martin T. Farris, Ohio State University  
 Robert Ferber, University of Illinois  
 D. A. Fergusson, University of California  
 Frank Whitson Fetter, Northwestern University  
 Clyde Olin Fisher, Wesleyan University  
 J. Anderson Fitzgerald, University of Texas  
 Dwight P. Flanders, University of Illinois  
 Louis O. Foster, Dartmouth College  
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 Herbert Fraser, Swarthmore College  
 R. E. Freeman, Massachusetts Institute of Technology  
 Albert W. Frey, Dartmouth College  
 J. Kenneth Galbraith, Harvard University  
 John O. Gallagher, Wesleyan University  
 David Gass, Williams College  
 Arthur D. Gayer, Queens College  
 Alexander Gerschenkron, Harvard University  
 Roland Gibson, University of Illinois  
 Max Gideonse, Rutgers University  
 Burton H. Gildersleeve, University of Oklahoma  
 J. B. Gillingham, University of Washington  
 Morris D. Glickfeld, University of Washington  
 Donald F. Gordon, University of Washington  
 Kermit Gordon, Williams College  
 R. A. Gordon, University of California  
 Richard A. Graves, University of Minnesota  
 Horace M. Gray, University of Illinois  
 Albert O. Greef, University of Connecticut  
 John A. Griswold, Dartmouth College  
 Morton C. Grossman, State College of Washington  
 Harold M. Groves, University of Wisconsin  
 Edward D. Gruen, Dartmouth College  
 John G. Gurley, Princeton University  
 John A. Guthrie, State College of Washington  
 William Haber, University of Michigan  
 Gottfried Haberler, Harvard University  
 Everett E. Hagen, University of Illinois  
 Harold G. Halczow, University of Connecticut  
 Earl C. Hald, University of Washington  
 Challis A. Hall, Yale University  
 Burton T. Hallowell, Wesleyan University  
 William Hamovitch, University of Buffalo  
 Arnold C. Harberger, Johns Hopkins University  
 Seymour E. Harris, Harvard University  
 C. Lowell Harriss, Columbia University  
 Hudson B. Hastings, Yale University  
 Everett D. Hawkins, Mount Holyoke College  
 Floyd B. Haworth, University of Illinois  
 H. Gordon Hayes, Ohio State University  
 Milton S. Heath, University of North Carolina  
 Clarence Heer, University of North Carolina  
 Richard B. Heflebower, Northwestern University  
 Warren W. Heller, University of Minnesota  
 William Hellmut, Oberlin College  
 Orris C. Herfindahl, University of Illinois  
 Kenneth W. Herrick, University of Connecticut  
 C. Addison Hickman, University of Illinois  
 Forest G. Hill, University of California  
 L. Gregory Hines, Dartmouth College  
 W. Z. Hirsch, University of California  
 Paul W. Hirseman, Syracuse University  
 Daniel M. Holland, National Bureau of Economic Research  
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 Schuyler Hoslett, Cornell University  
 Stanley E. Howard, Princeton University  
 J. Richard Huber, University of Washington  
 H. D. Hudson, University of Illinois  
 Holland Hunter, Haverford College  
 John G. B. Hutchins, Cornell University  
 Walter Isard, Harvard University  
 John Ise, University of Kansas  
 David A. Ivry, University of Connecticut  
 Clifford L. James, Ohio State University  
 Ralph C. Jones, Yale University  
 William O. Jones, Stanford University  
 Jules Joskow, City College of New York  
 Clarence R. Jung, Jr., Ohio State University  
 Alfred E. Kahn, Cornell University  
 Howard S. Kaltenborn, University of California  
 Alice B. Kane, University of Connecticut  
 James R. Kay, University of Texas  
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 Peter M. Keir, Amherst College  
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- Thomas L. Kibler, Ohio State University  
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 Richard A. King, University of Connecticut  
 Bruce W. Knight, Dartmouth College  
 Frank J. Kottke, University of North Carolina  
 Kenneth K. Kurihara, Rutgers University  
 Robert J. Lampman, University of Washington  
 Charles E. Landon, Duke University  
 Robert F. Lanzillotti, State College of Washington  
 Maurice W. Lee, State College of Washington  
 Wayne A. Leeman, University of Missouri  
 H. Liebenstein, Princeton University  
 Simeon E. Leland, Northwestern University  
 Ben F. Lemert, Duke University  
 Richard A. Lester, Princeton University  
 J. M. Letiche, University of California  
 Ben W. Lewis, Oberlin College  
 Martin L. Lindahl, Dartmouth College  
 D. Philip Locklin, University of Illinois  
 William W. Lockwood, Princeton University  
 C. S. Logdsdon, University of North Carolina  
 Clarence D. Long, Johns Hopkins University  
 Raymond H. Lounsbury, Dartmouth College  
 Meno Lovenstein, Ohio State University  
 Friedrich A. Lutz, Princeton University  
 Fritz Machlup, Johns Hopkins University  
 Edna C. MacMahon, Vassar College  
 R. C. Manhart, University of Missouri  
 Alan S. Manne, Harvard University  
 Everett J. Many, Duke University  
 Yves Maroni, University of Buffalo  
 Howard D. Marshall, Vassar College  
 William H. Martin, Williams College  
 Edward S. Mason, Harvard University  
 Will E. Mason, University of Buffalo  
 Harry E. McAllister, State College of Washington  
 Kenneth M. McCaffree, University of Washington  
 Paul McCollum, University of Kansas  
 J. L. McConnell, University of Illinois  
 Raymond H. McEvoy, University of Illinois  
 Edmund D. McGarry, University of Buffalo  
 E. Karl McGinnis, University of Texas  
 James W. McKie, Harvard University  
 Samuel C. McMillan, University of Connecticut  
 E. B. McNatt, University of Illinois
- Robert I. Mehr, University of Illinois  
 Glenn W. Miller, Ohio State University  
 John P. Miller, Yale University  
 Max F. Millikan, Massachusetts Institute of Technology  
 Hyman P. Minsky, Brown University  
 Royal E. Montgomery, Cornell University  
 Maurice Moonitz, University of California  
 Theodore Morgan, University of Wisconsin  
 Margaret G. Myers, Vassar College  
 James C. Nelson, State College of Washington  
 James R. Nelson, Amherst College  
 Arthur E. Nilsson, Cornell University  
 R. M. Nolen, University of Illinois  
 D. C. North, University of Washington  
 C. Reinold Noyes, Princeton, New Jersey  
 G. W. Nutter, Yale University  
 Paul M. O'Leary, Cornell University  
 John T. O'Neil, University of North Carolina  
 Guy H. Orcutt, Harvard University  
 Richard C. Osborn, University of Illinois  
 Donald W. Paden, University of Illinois  
 Andreas G. Papandreou, Northwestern University  
 John B. Parrish, University of Illinois  
 Carl E. Parry, Ohio State University  
 James W. Partner, Cornell University  
 Harold C. Passer, Princeton University  
 Ernest M. Patterson, University of Pennsylvania  
 R. D. Patton, Ohio State University  
 Edith T. Penrose, Johns Hopkins University  
 Winton Pettibone, University of Washington  
 Clarence Philbrook, University of North Carolina  
 Frank C. Pierson, Swarthmore College  
 Ann E. Pike, Ohio State University  
 Henry M. Platt, Dartmouth College  
 Kenyon E. Poole, Northwestern University  
 A. Neal Potter, State College of Washington  
 Charles L. Prather, University of Texas  
 L. J. Pritchard, University of Kansas  
 Claude E. Puffer, University of Buffalo  
 P. L. Putnam, University of Connecticut  
 Albert J. Raebeck, Princeton University  
 M. W. Reder, Stanford University  
 Harold L. Reed, Cornell University  
 Charles B. Reeder, Ohio State University  
 M. G. Reid, University of Illinois  
 C. F. Remer, University of Michigan  
 Robert A. Rennie, Johns Hopkins University  
 Lloyd G. Reynolds, Yale University  
 Lloyd P. Rice, Dartmouth College  
 Marshall A. Robinson, Ohio State University  
 Earl R. Rolph, University of California



- Kenneth Roose, Oberlin College  
 Raymond A. Ross, University of California  
 Vernon E. Ross, University of Connecticut  
 Eugene V. Rostow, Yale University  
 Jerome Rothenberg, Amherst College  
 Eugene Rotwein, University of Wisconsin  
 Arthur Salz, Ohio State University  
 Arnold W. Sametz, Princeton University  
 W. Sargent, Dartmouth College  
 Frederick M. Sass, University of Pennsylvania  
 John E. Sawyer, Harvard University  
 O. G. Saxon, Yale University  
 Henry H. Schloss, University of Texas  
 Joe G. Schoggen, University of Kansas  
 G. T. Schwenning, University of North Carolina  
 Tibor Scitovsky, Stanford University  
 Ira O. Scott, Jr., Harvard University  
 Stanley K. Seaver, University of Connecticut  
 Alfred L. Seelye, University of Texas  
 I. Leo Sharfman, University of Michigan  
 E. S. Shaw, Stanford University  
 Harry F. R. Shaw, Dartmouth College  
 Joseph Shister, University of Buffalo  
 George P. Shultz, Massachusetts Institute of Technology  
 R. A. Sigsbee, City College of New York  
 Earl R. Sikes, Dartmouth College  
 Edward C. Simmons, Duke University  
 David W. Slater, Stanford University  
 L. Edwin Smart, Ohio State University  
 C. Aubrey Smith, University of Texas  
 Caleb A. Smith, Brown University  
 D. B. Smith, University of Illinois  
 E. G. Smith, University of Texas  
 Robert S. Smith, Duke University  
 Vernon L. Smith, University of Kansas  
 Warren L. Smith, University of Michigan  
 Arthur Smithies, Harvard University  
 William P. Snively, University of Connecticut  
 I. J. Sollenberger, University of Oklahoma  
 Harold M. Somers, University of Buffalo  
 Herman M. Somers, Haverford College  
 Milton H. Spencer, Queens College  
 W. R. Spriegel, University of Texas  
 J. Warren Stehman, University of Minnesota  
 W. Blair Stewart, Oberlin College  
 George J. Stigler, National Bureau of Economic Research  
 John R. Stockton, University of Texas  
 Merton P. Stoltz, Brown University  
 Robert E. Stone, Syracuse University  
 John A. Stovel, University of Minnesota  
 Paul J. Straver, Princeton University  
 Robert H. Strötz, Northwestern University  
 Sidney C. Sufirin, Syracuse University  
 J. R. Summerfield, University of California  
 John D. Sumner, University of Buffalo  
 Boris C. Swerling, Stanford University  
 Alfred W. Swinyard, Syracuse University  
 Joseph Taffet, City College of New York  
 Philip Taft, Brown University  
 Lorie Tarshis, Stanford University  
 Virginia Galbraith Tauchar, Mount Holyoke College  
 George Rogers Taylor, Amherst College  
 Paul N. Taylor, University of Connecticut  
 Philip E. Taylor, University of Connecticut  
 Howard M. Teaf, Jr., Haverford College  
 Richard B. Tennant, Yale University  
 Ralph I. Thayer, State College of Washington  
 Vladimir P. Timoshenko, Stanford University  
 R. D. Tousley, State College of Washington  
 Truman G. Tracy, University of Missouri  
 Donald S. Tucker, Massachusetts Institute of Technology  
 D. G. Tyndall, Carnegie Institute of Technology  
 Arthur R. Uppgren, University of Minnesota  
 Abbott Payson Usher, University of Wisconsin  
 Roland S. Vaile, University of Minnesota  
 Jacob Viner, Princeton University  
 Charles E. Walker, University of Texas  
 Pinkney C. Walker, University of Missouri  
 Donald H. Wallace, Princeton University  
 Robert F. Wallace, State College of Washington  
 Leonard L. Watkins, University of Michigan  
 E. T. Weiler, University of Illinois  
 Paul F. Wendt, University of California  
 Lawrence L. Werboff, Northwestern University  
 R. B. Westerfield, Yale University  
 William O. Weyforth, Johns Hopkins University  
 Arthur M. Whitehill, Jr., University of North Carolina  
 C. R. Whittlesey, University of Pennsylvania  
 W. D. Wickizer, Stanford University  
 Clair Wilcox, Swarthmore College  
 Harold F. Williamson, Northwestern University  
 Kossuth M. Williamson, Wesleyan University  
 E. E. Witte, University of Wisconsin  
 Elmer Wood, University of Missouri

G. Walter Woodworth, Dartmouth College  
 Edwin Young, University of Wisconsin  
 Alois L. Zaremba, Ohio State University  
 D. A. Worcester, Jr., University of Washington  
 Erich W. Zimmerman, University of Texas  
 Holbrook Working, Stanford University

STATEMENT OF G. L. BACH<sup>2</sup>

These comments are in reply to your letter of September 22, suggesting that I state briefly my views with respect to recent changes in short-term interest rates and the current problem of monetary policy. I have tried to arrange my comments in a series of consecutive paragraphs, which comprise in effect an analysis of the current situation and a set of suggested policies.

(1) The evidence seems to me clear that large changes in employment, national output, and the price level are almost invariably accompanied by large changes in the same direction in the volume of currency and bank deposits per capita. Moreover, significant changes in direction in the volume of over-all output and employment are almost invariably preceded or immediately accompanied by changes in the same direction of the per capita money supply. These patterns have been so consistent, and the analytical reasons for believing that a significant causal relationship exists between changes in the per capita money supply and the volume of over-all employment and output are so convincing, that I believe we must consider the per capita money supply a significant factor among the determinants of the level of over-all economic activity.

This proposition holds, although the exact chain of relationships from changing money supply to economic activity has not been indisputably established. The major connections appear to be through the interest rate, involving both cost elements and changes in capital values of assets, and, probably more importantly, through the direct impact of changing liquidity and availability of loan funds for the public on individual and business spending. Fortunately, it is not necessary to weigh these two channels exactly, since most monetary policy measures work through both in the same direction at the same time. In this connection, it is important to recognize that, however we assess the evidence on the effectiveness of easy money in inducing revival, there is clear evidence that tight money has repeatedly been important in checking inflationary booms.

(2) Since this is true, and since the problem of business fluctuations is still a very significant one in our economy, it follows that governmental (Treasury and Federal Reserve) control over the supply of money is an important weapon in our small and somewhat untried arsenal against economic fluctuations. It also follows that it is important to have the flexible use of monetary policy against these fluctuations, in contrast to the present arrangements where monetary policy is largely hamstrung under the Federal Reserve policy of essentially guaranteeing maintenance of United States bond prices above par. Current Federal Reserve policy has essentially negated flexible monetary policy, even though the stability of interest rates per se may be relatively unimportant compared to the general liquidity (availability of funds) factor.

(3) I believe that the evidence points toward moderate to strong inflationary pressure over the several years ahead. Current inflationary pressures appear to be strong. I see no reason to expect this situation to change markedly, short of a significant change in the over-all international situation or United States attitudes toward it.

(4) Under these circumstances, I believe that monetary policy should be reactivated and brought to bear against inflationary pressures much more strongly than has been true in the recent past. In particular, I believe that two steps should be taken:

(a) Short-term interest rates on Government securities, and on private loans insofar as they are affected, should be permitted to rise, and to rise substantially. Given the high degree of over-all liquidity of the economy and the easy-money situation guaranteed by Federal Reserve support of long securities, such a rise in short rates could not be expected to exert major anti-inflationary pressure. It would, however, in my judgment have the following important values.

First, it should have a moderate and general tightening effect on bank loan policies and on general money-market psychology, thus affecting to some extent the availability of loan funds. Second, higher rates would exercise some effect

<sup>2</sup> Dean, School of Industrial Administration, Carnegie Institute of Technology, Pittsburgh, Pa.

through the cost side. In a very strong inflationary situation this would probably not be a very important factor, but in a more moderate situation such as appears ahead it may be a significant deterrent in marginal cases. Third, and perhaps most important, flexible upward adjustment of short rates would serve as notice to the money market that a gradual reestablishment of effective monetary policy is underway, and that the market should adjust itself to the gradual removal of rigidity in the price of long-term governments at or above par. Such notice by the Federal authorities seems essential to avoid the danger of drifting again into dangerous easy-money policies for the long defense period apparently ahead, just as we drifted into dangerous easy-money policies without seriously considering the consequences during the early days of World War II.

(b) Federal Reserve authorities should immediately lower the effective support price for long-term Government securities to slightly below par, letting the market know informally but clearly that the Reserve intends to take this action and, for the current defense crisis, to support long issues moderately below par if such support becomes necessary. This action would have the important effect of raising long rates moderately. More important, it would remove the strong standing invitation to holders of long issues to convert into money on very advantageous terms at any time. It would at the same time retain the essential protection of capital of any distress sellers of long securities. This compromise action would fall considerably short of a completely flexible and strongly anti-inflationary monetary policy, but it would mark a real advance in concrete terms, and in announcement value, away from the completely easy-money arrangements which have so far blocked significant monetary policy against the war and postwar inflation.

(5) The question of the cost of such a policy to the Treasury needs analysis. Here clear recognition of fundamentals is required, in contrast to acceptance of the superficial appearance of the problem.

(a) The Treasury is only an agent of the American public, and interest costs on the public debt are merely transfer payments from one segment of the public to another. Thus, "cost" to the Treasury is fundamentally a meaningless and useless concept, unless it is used to connote primarily a problem of redistribution of income among the various groups of the population involved in payments to and from the Treasury. The problem here is sound congressional distribution of the tax burden and proper handling of Treasury policy in selling Government securities.

(b) Against this transfer problem arising from an increase of interest payments must be set the convincing evidence of the importance of a tightening money supply and liquidity situation in restraining inflationary pressures. In my judgment, even a very substantial increase in Treasury interest costs would bulk small compared to the advantages of restraining inflationary developments in the present quasi-war economy.

(c) Even from a Treasury viewpoint, there is an important advantage in paying higher interest rates on the national debt if inflation can be restrained. First, there is already clear-cut evidence of growing public awareness of the impact of inflation on holders of fixed-dollar-value Government securities. Over the past decade, \$1,000 invested in the highest-yield Government securities (United States Savings bonds) would now buy only about \$750 worth of consumers' goods (BLS price index), even after the large interest accumulation is added on to the principal. This elementary fact is increasingly obvious. Heavy stock-market investments and recurring upward pressure on prices of inflation-hedge assets point clearly to Treasury difficulties in peacetime or quasi-war borrowing from the public on a voluntary basis unless the inflation is checked. Second, with huge Government expenditures ahead on defense, even a very small restraint on inflation will save far more in total Government spending than the billion or two of increased interest charges involved in increases in short and long-term rates. In my judgment, under these circumstances excessive concern over nominal savings in Treasury interest cost is likely to go down in history as a classic example of fiscal short-sightedness.

(d) Treasury concern lest the market for governments be "unsettled" is legitimate in face of the huge volume of refundings and possible new money issues that will have to be handled. While it is important to keep the market from a panic condition, excessive preoccupation with market "confidence" and "stability" is short-sighted. The erosion of the value of the dollar under continued inflation seems to me much more likely to create a huge barrier to Treasury borrowing from the public than any temporary "unsettling" involved in moving toward higher and more flexible rates.

There seems to me to have been considerable loose talk on this point, involving confusion between purchases by the public and by the banks. The Treasury, with the cooperation of the Federal Reserve, can always sell securities to the banks at any given rate by pumping in enough excess reserves to make the banks highly liquid. This, however, is a perversion of proper Treasury borrowing policies in an inflationary period, and main emphasis should be placed in sales to the public. For such sales on a voluntary basis, continued inflation promises to become a major barrier. Under these circumstances, an informal Reserve support price for long issues moderately below par for some time, perhaps later giving way to a still lower support price, seems to provide a reasonable compromise between keeping the market "settled" and trying to freeze at least part of the outstanding issues into a lower level of liquidity than they now possess.

(6) These monetary steps alone cannot be counted upon to check the current inflationary pressure. Large increases in taxes, beyond the rises currently being contemplated, must provide the backbone of any realistic anti-inflation program when inflationary pressures are strong. Coupled with such an aggressive tax policy, the monetary restrictions suggested above should constitute an important supplement, even though they cannot carry a major share of the task as long as the long rate is held down and liquidity assured by a support policy of the Federal Reserve, even moderately below par. Reliance on partial direct controls over individual prices and wages seems to me quite unrealistic under present circumstances. History demonstrates that, to be effective, partial direct controls need to be rapidly expanded to complete controls over prices and wages if the inflationary pressures are strong. I cannot believe that the American public will be prepared to accept effective over-all direct controls unless we become involved in a large-scale, all-out war. To believe that the public will accept even partial direct controls at points where the controls really bite, also, seems to me to be politically unrealistic in the defense situation into which we appear headed. My conclusion is that for the type of period ahead any effective control must come through fiscal-monetary measures.

(7) Concerning the allocation of monetary-fiscal-debt powers between the Treasury and Federal Reserve, I strongly support the approach advocated by the Douglas subcommittee on the following points: (a) Upgrading the status of a smaller, strengthened Federal Reserve Board of Governors; (b) joint and coequal consultative status between the Federal Reserve and the Treasury in debt-monetary policy making; (c) clearer allocation of monetary policy responsibility to the Federal Reserve through congressional directive. I support these steps not because I believe the Federal Reserve should really be vigorously independent, since such vigorous independence seems to me to be quite unrealistic in the current setting. I support them rather as firm steps toward assuring more equal status for the traditional central-bank anti-easy-money attitude in inflation-period governmental policy formation. While minor differences between the Federal Reserve and Treasury, such as those of recent months, do no great harm, fundamentally the Nation's monetary-fiscal-debt policy must be unified and free of strong inner conflicts. To be most useful to the Nation, this unification must come on the basis of careful consideration of the points of view advocated by both operating Treasury officials and central-bank officials, in a framework where the parties are considered, and consider each other, as roughly coequal, possibly in a National Monetary Council.

(8) In handling refundings and new money issues over the period ahead, I urge reconsideration of current Treasury policy to convert the debt predominantly to short issues. This policy has the illusory advantage of minimizing interest charges, but at the very real expense of decreasing the Government's flexibility in adjusting debt policy to over-all economic conditions. In particular, this inflexibility takes the form of guaranteeing the short-term liquidity of the public debt to the public, regardless of Federal Reserve and Treasury feelings about the desirability of tight or easy money.

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#### STATEMENT OF LESTER V. CHANDLER<sup>3</sup>

In accordance with the request in your letter of September 22, this statement will limit itself to "the specific implications and long-run effects on Government finances and on stability of the economy in following at this time a policy of allowing interest rates on short-term Treasury issues to rise." Though it will not

<sup>3</sup> Department of Economics and Social Institutions, Princeton University.

be discussed here, it might also be useful to study the desirability of preventing yields on the longest-term marketable issues from ever rising above 2½ percent, especially in periods of inflation.

First, let me deal with the impact of higher rather than lower short-term rates on Treasury financing. The immediate and obvious effect is, of course, to raise somewhat the interest costs on the national debt. But this should not be accorded undue importance simply because it is immediate and obvious. (1) The amount involved cannot be large if the rise is in fact limited to rates on short-term issues. This is especially true if one deals with the "net interest" charges after taxes collected out of the increased interest income. (2) Somewhat higher short-term rates may make it possible to borrow larger amounts on short-term securities so that less will have to be borrowed on long-term issues where the rates are higher. To the extent that this results, there is not necessarily any increase in the average interest rate on the total debt. (3) The tax increase necessary to cover any net rise of interest charges would certainly be only a small part of the total tax bill and would be a small price to pay for a monetary policy that would inhibit inflation. (4) Even if the transfer of higher interest payments to the creditors of the Government did tend toward a less desirable distribution of income—which does not necessarily follow—it would be far less undesirable than the widespread and arbitrary shifts of income brought about by inflation, which is actually encouraged by a continued easy-money policy in a period like the present one.

In my opinion, the effects of temporarily higher short-term rates during inflation periods like the present one could only benefit the position of Government credit in the long run. It is certainly no reflection on the national credit to have to pay higher interest rates when interest rates in general are rising. The real threat to Government credit is that people will come to lose confidence in the future purchasing power of the dollars in which the debt is stated. A continued easy-money policy in the face of inflation—a continued willingness of the Federal Reserve to coin Government securities into money to feed the inflation—is likely to encourage such a loss of confidence in dollars and also in Government securities stated in those dollars.

A very generous supply of credit and accompanying low interest rates are highly desirable in a period of actual or threatened unemployment. They tend to expand private spendings for investment purposes, especially for highly durable housing and producers' durable goods and indirectly to promote consumer spending because of the higher incomes generated in the capital goods industries. The maintenance of low interest rates and a generous supply of credit also stimulate private spending in the same way during periods of inflation—perhaps even more than in depressed periods. This is exactly what we want to avoid in this inflationary period when the prospect is for less rather than more goods and services to be available for private purchase. Yet it is important to note that the maintenance of inflexibly low rates on Government securities as the Treasury seems to advocate, would have the effect of assuring that credit for private spending would continue to be freely available in large quantities and at low cost. This follows from three facts: (1) Investors, not only banks but many others, hold huge amounts of Federal securities; in fact, their holdings of these are greater than their total holdings of private bonds, mortgages, and other private debts. The interest rates that they receive on these securities constitute their incentive to hold these securities rather than to spend the money or to lend to others. And the lower the interest rate, the lower the "cost" of spending the money or of lending to others. (2) All these investors have complete freedom to hold the securities or to sell them in order to acquire money to spend or to lend to private borrowers. Thus the cost of money to private borrowers cannot rise by more than a normal margin above the yields on private obligations. (3) The only way that interest rates can be held down in the face of large demands for credit is for the Federal Reserve to purchase all the governments that others are not willing to hold at the official levels of yields—that is, to monetize those parts of the debt, thereby adding to bank reserves and bank lending power as well as directly increasing the private money supply. In fact, the results of Federal Reserve monetization of debt to hold down interest rates at an inflexibly low level are almost exactly the same as those that would follow from the following legislation by the Congress:

1. Authorize the Secretary of the Treasury to issue additional greenbacks not to exceed the amount of the Federal debt now in the hands of the banks and the public.

2. Empower the Secretary to issue these greenbacks in whatever quantities were necessary to prevent any rise in short-term interest rates and to prevent the price of any Government security from falling below par.

Such a policy could, at least for a time, hold down interest charges on the national debt and prevent the prices of Government securities from falling. Its principal disadvantage would be that it would be a policy of monetizing the debt at the option of the holders, and the demand for monetization would be greatest when the private desire to spend and the private demand for credit were highest. In short, it would encourage inflation. Yet this hypothetical policy, which would clearly militate strongly against economic stabilization, would in every significant respect produce the same results as a Federal Reserve policy of creating whatever additional amounts of money were necessary to prevent any rise of interest rates. Both would add fuel to the inflationary fire and to about the same degree.

It is impossible to predict with accuracy the degree to which any given rise of interest rates would inhibit inflation. All that we can be sure of is that a restrictive monetary policy that would involve some rise of rates would have some anti-inflationary effect, as compared with a continuous and unabated easy-money policy. I am inclined to think that the effectiveness of monetary policy as an anti-inflationary force has come to be much underrated by many people, both in and out of Government. Those who argue that it is ineffective usually assume that a restrictive policy exerts its effects only by raising interest rates, and then go ahead to argue (1) that interest costs are such a small part of the total cost of doing business that a moderate rise of rates cannot much affect private decisions as to the amount of investment expenditures, except possibly in housing and very durable producers' goods; and (2) that a moderate rise of interest rates has little effect on the willingness of people to save rather than spend out of any given level of income. Surely this is an inadequate and far too narrow a view as to the manner in which a restrictive credit policy inhibits inflation. In their total effect the following are, in my opinion, much more important:

(1) Credit rationing. Banks limit the amount of their credit far more by various direct rationing than by raising interest rates to a sufficiently high level to reduce the effective demand. The Federal Reserve has no effective way of forcing banks to restrict credit by rationing so long as it must stand ready to supply them with almost unlimited reserve funds by purchasing low-yield governments from banks and other holders. But by simultaneously raising yields on short-term governments, thereby increasing the cost of reserve funds, and accompanying this with various types of moral suasion, the Federal Reserve could with some success induce banks to be less liberal with their loans. (2) Effect on private expectations as to the course of price levels. The maintenance of an inflexible easy-money policy by the Federal Reserve is, in effect, a clear statement to the public at large that the inflation will be aided, rather than hindered, by monetary policy. This tends to increase private spendings. But a restrictive monetary policy, with some rise of interest rates, would help somewhat to reduce fears of further inflation and would reduce the private demand for credit and the private tendency to spend. It would also make lenders less sanguine as to the safety of lending large amounts to marginal borrowers. (3) The rise of short-term rates would probably reduce somewhat the availability of long-term private credit. (4) The "reaching for yields." With existing low interest rates many investors, especially financial institutions, feel "starved for earnings." This is especially true of commercial banks, whose earnings are so low that most of their stocks have a market value considerably below their asset value, but it is also to some extent true of others. Thus, they are strongly inclined to "reach for yields"—to shift out of governments into private obligations whenever the latter offer any significant increase of yield. A rise of rates on governments would decrease this shift to private loans, both by making the institutions more satisfied with their earnings on governments and by making lenders somewhat less sure that the inflation would be sufficiently large as to make the private loans safe. (5) The "multiplier" and other derivative effects of a restrictive policy. Those who would discard monetary policy and rely solely on fiscal policy to restrict inflation usually argue for the superior efficacy of their favorite instrument by pointing not only to the direct effects of taxation on private income but also to the induced decline of consumption, the induced decrease of investment spendings, and so on. But it should be noted that a restrictive monetary policy also operates in these ways. To the extent that tighter credit has any initial effect in decreasing private spendings it, too, has reverberating effects; the initial decline of spendings reduces or impedes the rise of money incomes and has its own cumulative effects similar to those of a restrictive fiscal policy.

In short, a restrictive credit policy operating in all the ways enumerated above, and not just by increasing the cost of private credit, can exert a quite significant anti-inflationary effect—an effect that is certainly worth the price of somewhat higher service charges on the national debt. But it is impossible to achieve those

effects while the Federal Reserve is chained to the objective of preventing any rise of interest rates.

I should like to conclude this statement with three observations. (1) I do not argue that we should rely solely on restrictive monetary policy to fight inflation. Specifically, it would be foolish to follow an inflationary Government fiscal policy and expect a restrictive monetary policy to counteract it as well as inflationary pressures originating in the private sectors. Such a policy would probably fail to prevent inflation. But at the same time it is equally unwise to expect that in practice a restrictive fiscal policy will be successful if it is accompanied by a continuous easy-money policy that has the effect of assuring to the private sectors an almost unlimited supply of money at very low cost. In actual practice, neither instrument is likely to be employed aggressively enough to accomplish its anti-inflationary purpose with the other policy working against it. But if the two policies are properly coordinated and both employed for anti-inflationary purposes their effectiveness can be greatly enhanced. (2) The great threat to the credit of the Federal Government and to the health of the economy as a whole is to be found not in a rise of interest rates in general during periods of inflation but in the threat of a long and continuous decline in the purchasing power of the dollar. This danger is increased by a continuously easy-money policy in inflationary periods. People have already seen the purchasing power of their dollars, bonds, and other fixed-price assets decline more than 40 percent during the past 10 years. We cannot be certain that they will continue to be willing to buy and hold Government bonds if they come to expect this trend to continue. (3) The policy of holding interest rates at extremely low levels at all times and under even the most inflationary conditions—a policy that has evolved only during the past 10 years—is not just an unimportant small change in our traditional central bank policy; it is revolutionary in its implications. In effect, it is a policy of standing ready to coin all Government securities into money at the demand of their holders, and these demands are likely to be greatest at the very time that inflationary pressures are already present and people want to spend more. Such a revolutionary change in our monetary policy should not be made lightly and merely for the purpose of holding down interest charges on the debt. There is still something to be said for the more traditional principle that the Treasury should not be permitted to control credit conditions in the market merely to suit its own convenience in selling securities, but should adapt its terms of financing to those credit conditions in the market which were determined by the central bank to be in the general national interest. A healthy economy is surely more important than low interest rates on the national debt.

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STATEMENT OF LLOYD C. HALVORSON <sup>4</sup>

This is in reply to your letter of September 22.

It seems to me that more research is needed on some of the presumptions as to the effect of interest rates on the demand for credit. When I see the terrific interest rate many people are willing to pay in order to get what they want, as long as their money holds out, I often wonder if high interest rates materially affect the demand for consumer credit. The elasticity of demand for consumer credit probably varies with the economic situation; and when scarcities threaten, the demand for credit becomes very inelastic as long as the scarce items are available.

The situation, I believe, also exists in the business field. Business concerns, too, are eager to buy when scarcities threaten. The present nature of our price structure is one factor tending to make the interest charge of little consequence when scarcities threaten. For example, if the list price on a new refrigerator is \$200 and if you are able and willing to pay \$250 for it on installment, then the interest rate on installment loans is of little consequence as far as deterring purchases. The same is probably true in the business field.

I believe that in the long-term credit field, the interest rate has much more influence, especially if it would appear to individuals and firms that the interest rate should go down at a later date. But lately it seems that firms are more and more willing to undertake long-term improvements or investments with short-term credit and converting to long-term credit when it appears advisable.

I recognize that the interest rate has effect on demand for credit, but I believe the demand is very inelastic at times when inflation or scarcities are threatening.

The savings process is becoming so institutionalized that I doubt that higher interest rates would do much to induce greater savings unless the interest rate were increased 50 or 100 percent.

<sup>4</sup> Economist, the National Grange, Washington, D. C.

This leads me to wonder if the various means of rationing or restricting credit are so much more effective in combating inflation as to make the practical changes in interest rates quite unimportant. I am not taking a stand on the effect of interest rates on the demand for credit, but I am saying that considerable research is needed before we really know what we are talking about. I am inclined to believe that higher interest rates would not do much to stop inflation, at least not nearly as much as the forms of credit restriction.

If a higher short-term interest rate would materially reduce inflationary forces, then I would say that the Federal Reserve Board should have the power and the governmental sanction to raise interest rates in spite of the increased cost on the Federal debt. If it is decided to increase the interest rate on individuals and firms to deter them from bidding up the price of goods, we should at the same time try to preserve a low interest charge on the governmental debt. This could be done by requiring all banks to be members of the Federal Reserve System and increasing reserve requirements to a very high figure and turning the excess profits of the Federal Reserve System over to the Treasury. It really would not matter much whether or not the Federal Reserve banks maintained a special preference for Federal obligations to keep the interest rate on them down, because the profits would accrue to the Treasury.

Another method would be along the lines of the Eccles proposal of a few years ago. The commercial banks could be required to have a supplementary reserve of Government bonds, and the reserve requirement could be high enough to cause the banks to be willing to buy them at a low interest rate.

I do not believe that either of the two above proposals would be unfair to banks as I would not contemplate cutting bank earnings, but I definitely contemplate preventing the banks from enjoying a windfall out of a public policy designed to stop inflation by raising interest rates.

Again I want to say that in my opinion it is preferable to restrict credit in order to combat inflation by increasing the amount of down payment, by shortening the period of payment, and by making bankers less willing to lend than by increasing the interest rate which people have to pay.

As you can see from my approach, I can hardly give an answer to the major issue apparently before you. In fact, I think it is a gross mistake to be at all concerned with whether the Treasury or the Federal Reserve System should have the final control on interest rates and credit matters. It is not who has the control that matters as much as what policies are pursued. With a change in personnel of the two agencies, it is possible, though maybe not probable, that the two agencies would switch sides or be in agreement on one or the other side. I am not certain whether the Treasury or the Federal Reserve Board would come closest to agreeing with me. I believe that neither agency is suited to have paramount control over credit and interest rates, because both are certain to have biases and one-sided pressures. For this reason, I favor more specific legislation by Congress on these matters and a Monetary, Credit, and Fiscal Council, made up not only of full-time governmental officials but with more than simply advisory power.

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#### STATEMENT OF WESLEY LINDOW <sup>5</sup>

In response to your request, I am writing to give you a very brief statement on the difference in views between the Treasury and the Federal Reserve regarding short-term interest rates as I see them.

At the outset, I want to say that I think it is natural for the Treasury and the Federal Reserve to have differences of opinion on the subject of interest rates. Both agencies are staffed with able people who are sincere in their views. I believe that differences of opinion would exist even if the officials of the two agencies were to exchange jobs. Also, the same fundamental differences would be present even if the two agencies were merged. In that event, the different points of view would be held by the respective bureaus in charge of central banking and public-debt management, respectively.

In my opinion, the Treasury and the Federal Reserve are Siamese twins under present powers of the two agencies, and neither can move very far without pulling the other along. On the whole, I think it is a good thing that there are two agencies involved here. Competition in ideas from two different points of view is a healthy thing.

<sup>5</sup> Vice president, Irving Trust Co., New York, N. Y.



I mention these points because I think it is important to realize that the current dispute has very deep roots, and it is easy to misinterpret the situation. The problem, I want to emphasize, is a basic conflict between the functions of central banking and the functions of public-debt management. The present dispute is only a symptom of this basic conflict.

The popular view is that the root of the issue is that the Treasury wants to avoid increases in budgetary interest costs. I doubt that this explanation is adequate. I think the cost factor is not the real issue.

To get at the public-debt point of view, let us consider the debt as a huge aggregate of liquid claims possessing characteristics very close to money. The Federal debt is 10 times the volume of currency outstanding and somewhat over half the volume of all debt in the United States. Naturally, the Treasury is inclined to the view that changes in the capital values of the debt are very risky indeed. Interest-rate fluctuations are highly technical; yet they do bring about changes in the value of public-debt obligations, which it is hard for the public to understand. Stability in the debt, it is felt, is of the utmost importance to the whole financial structure.

Public confidence is a fragile thing. Many people used to say it would be impossible to handle a debt of over \$100,000,000,000 and that it would result in run-away inflation. Now perhaps we are becoming blasé about the big debt, but it is still a great problem to handle; and the Treasury, I am sure, wants to avoid running any risks of upsetting confidence in the debt. It should be remembered, too, that there is a large group of professional portfolio managers on the scene today who may on occasion be very "nervous Nellies."

I don't think this means that the Treasury wants to hamstring the Federal Reserve or maintain absolute rigidity in interest rates, but the Treasury will naturally be exceedingly cautious and perhaps excessively so in agreeing to increases in rates.

In the present situation, the central-bank point of view naturally is that short-term interest rates should be raised. It is argued that this will have some useful effects in curtailing inflationary pressures with a negligible risk of upsetting confidence or of laying too heavy a hand on the economic structure.

In contrast, I believe that the situation looks quite different from the point of view of public-debt management. Here it is felt that increases in short-term interest rates are of negligible importance in stemming inflationary pressures, while they pose a threat to confidence generally since they may upset the equilibrium in the bond market. Also, it is argued that higher short-term rates lead to higher costs for carrying the debt with no substantial quid pro quo in holding down inflationary pressures.

Now this difference between the two points of view is something that cannot be proven one way or the other by any method that I know of. On the contrary, it is a question of judgment.

It would be helpful if studies could be undertaken along several lines to provide some new data on the vital issues here. I would like to see some practical investigation of the effects of changes in interest rates on (a) consumers, (b) business, and (c) lenders. Are consumers motivated to spend less and save more with higher interest rates? Is business motivated to curtail investments in plant and equipment or its inventory holdings because of higher interest rates? Are lenders motivated to reduce loans by increases in interest rates (perhaps through losses on their Government bond accounts)? These are fundamental questions which ought to be investigated to the fullest extent. Monetary theory needs fresh empirical evidence.

I think that it would also be a very constructive thing to make some studies on the real place of the public debt in our economic system today. Perhaps the public debt should be considered as a kind of monetary system of its own outside the realm of central banking and the private banking system. If so, how can the public debt be sheltered from the effects of central-bank operations? I have no panaceas to offer, but I would like to see a series of studies made along these lines. Some foreign countries have tried various devices in this direction—some not very attractive perhaps—but I think all of these should be reviewed.

The history of central banking shows a long evolutionary process. I am confident that the new problem of circumventing the public debt, without damaging it, will be solved in the long run by the development of still more new ideas.

STATEMENT OF R. A. MUSGRAVE<sup>6</sup>*1. Purpose of public interest payments*

The Government's interest payments on voluntarily held public debt is the price paid for enticing investors to hold public obligations in a form which is compatible with economic stability. Under present conditions of inflation pressure, this means that such debt should be held in a form which is relatively illiquid. At other times, and under deflation conditions, more liquidity and partial cashing of the public debt (i. e., the absorption of non-bank-held debt by the banking system with the resulting exchange of money for debt holding outside the banking system) may be desirable. The type of debt policy<sup>7</sup> called for thus depends upon economic conditions and on the emphasis to be placed upon monetary-debt as against other stabilization policies.

But whatever the particular emphasis on debt management, there is no objection in principle to an increase in the interest bill if such additional payments are the price which must be paid to secure continued holding of public debt under inflation conditions. The principle of economy in debt management is not that budgetary interest cost should be reduced as much as possible (i. e., to zero by exchanging debt for money obligations) but rather that the interest dollar should be spent as effectively as possible; in other words, that it should be made to purchase the desired degree of illiquidity.

*2. Bank credit and short-term rates on Treasury issues*

Let us now consider how this relates to the control over commercial credit. Economists of late have argued correctly that the effectiveness of banking policy in checking inflation is a matter of reducing the availability rather than of raising the cost of credit. If the volume of credit available to be borrowed is reduced, less funds can be borrowed and less will be spent. In short, private borrowers must be satisfied with less credit, even though they would be willing to pay a higher rate of return than is demanded.<sup>7</sup> Nevertheless, in the process of tightening the volume of available credit, some upward adjustment in commercial rates is likely to occur. And under conditions where commercial banks hold large volumes of marketable public debt, this rise in commercial rates inevitably carries the byproduct of an increase in rates payable on short-term Treasury debt.

The same relationship holds if private demand for bank loans increases, as it did during recent months. Given such an increase in demand, more attractive private paper becomes available for purchase by the banks. And the banks will find it possible to substitute such paper for their holdings of Government securities which are largely short term. Public policy, in this case, has two options.

If it is desired to maintain the prevailing yield of short-term Treasury issues, the Federal Reserve must purchase whatever amount of such securities the banks wish to sell. The banks may then use the funds obtained to extend private loans and thus add to inflation pressure. And, to make matters worse, Federal Reserve purchases of short-term debt will add to bank reserves and hence permit multiple expansion. If, on the other hand, it is desired to avoid a shift of bank holdings into private paper, public authorities must persuade banks to hold on to their public debt by making such debt more attractive. This they may do either by raising the yield on short-term issues or by making higher-yielding longer-term issues available to the banks. Either course will raise budgetary interest costs, and either course might be implemented through appropriate refunding or through swaps out of the Federal Reserve portfolio. These are points of detail: The heart of the matter is that if the banks are to be enticed not to shift into private credit, in view of increased demand, they must be bought off by similarly increasing the attractiveness of investments which the Treasury has to offer.

*3. Recent developments*

Let me now turn to the developments of recent months. As the figures show, there has been no reduction but a continued increase in bank holdings of private debt and loans. Such reduction in the availability of credit as might have resulted from Federal Reserve action, therefore, must have taken the form of preventing an even greater expansion than did, in fact, occur. Unfortunately, there is no simple way in which the volume of "expansion prevented" can be measured. It stands to reason that some increase in business and consumer liquidity, and hence some increase in inflation pressure, was prevented by the Federal Reserve policy of August and September; but no one can say just what the

<sup>6</sup> Department of Economics, University of Michigan, Ann Arbor, Mich.

<sup>7</sup> We may therefore accept the fact that the demand for credit is inelastic to interest, but still admit to the effectiveness of credit restriction.

precise degree of prevention was, or by how much this gain exceeded or fell short of the disadvantage of an increased interest bill. However, it must be noted in all fairness that such a precise measure of pro and con is rarely possible with regard to any public policy, whether credit or otherwise.

Also, it must be noted in all fairness that it is difficult to say just what degree of increase in yield (or rates) is needed to bring about a given degree of restriction in credit availability. This, it seems to me, follows if the case for credit controls is argued in terms of availability rather than cost considerations. While the willingness of commercial banks to hold Treasury issues at prevailing yields was reduced undoubtedly by a growing private demand for loans, the market's hesitancy to absorb the new issue may well have been accentuated by the (valid or invalid) impression that Federal Reserve authorities favored refunding at higher yields. Thus the creation of expectations of higher yields cuts two ways: On the one side, it is a means by which central-bank authorities can induce banks to refrain from extending credit; on the other, it invites banks to hold out for better terms and may well produce a situation where the competing increase in the yield of Treasury securities must be higher than otherwise needed to prevent a given expansion of private credit.

Again it is difficult to say just how much one or the other factor added to the recent situation. The relationship between restriction of credit availability and necessary increase in the yield of Treasury issues is a subtle matter, depending on many factors of market psychology and tactics. The average citizen—who bears the burden of inflation that might have been avoided, or who pays the cost of the increased tax dollar which might have been saved—can hardly rejoice in the events of August and September. He can ill afford that interagency conflict between Federal Reserve and Treasury authorities should be permitted to interfere with an efficient operation of public policy in this highly delicate area.

But, whatever the recent record, the more important problem is what shall be done in the future if the demand for bank credit for inflationary purposes continues to rise, as it most certainly will unless a more rigorous anti-inflation program is applied on a broad scale. If banks are to be induced not to sell Treasury issues, continuous competition for bank funds may then force much more substantial increases in the yield on bank-held Treasury debt than occurred to date. Should such public competition for bank funds be undertaken by making available more attractive issues (i. e., by raising the yield of short-term Treasury debt or by supplying the banks with longer-term issues) or should the Federal Reserve absorb short-term holdings, thus permitting a shift into private credit or multiple expansion?

#### 4. *Mandatory bank holding of Treasury debt*

Fortunately, I do not think that the problem must be viewed in quite this form. The entire dilemma, as outlined so far, results from the fact that commercial banks hold large amounts of short-term Government securities on a voluntary basis. And this is not an unalterable situation. By transforming such debt into supplementary reserves, the holding of which would be mandatory in addition to prevailing cash reserve requirements, a setting may be created in which the availability of private credit may be restricted and short-term commercial rates may be permitted to rise without, at the same time, incurring an increase in interest payable on the bulk of bank-held Treasury debt. Whether such reserves should be held in the form of special nonmarketable (but not marketable) issues, or whether they should be on deposit at the Federal Reserve with some interest paid thereon, makes little difference. This and other matters of technical detail—e. g., the amount of bank-held debt to be thus frozen, the return to be paid on the reserve securities or the reserve deposits, the volume of marketable short-term debt to be retained as a money-market medium, and so forth—cannot be considered here.<sup>8</sup>

I am aware, of course, that such a proposal meets with strong opposition, including the contention that the plan is technically not feasible. Since I cannot go into details in this context, let me merely assert that this is not the case. While there are difficulties involved, they can be overcome quite adequately if it is desired to adopt such a plan. The great merit of such an arrangement, as I see it, is that by making bank holding of short-term Government securities mandatory, the banks would be deprived of their ability to circumvent the effectiveness of general credit restriction by shifting from public to private paper; that thereby

<sup>8</sup> As a more moderate approach a 100-percent reserve requirement might be imposed, applicable to additional deposits. Thereby, the expansion of private credit, made possible by bank sales of Treasury securities, would be limited to a 1:1 basis. However, this is still too much. A basic solution to the problem is provided only by the secondary reserve plan.

the problem of controlling the availability of private credit would be disassociated from the problem of what earnings the commercial banks are entitled to receive on their holdings of short-term Treasury securities; and that a tightening of bank credit could be undertaken at substantially less cost to the taxpayer than is the case now.<sup>9</sup>

General objections to such an arrangement have been (1) that it would subject bank earnings to Government control; (2) that it would impose undue public control over bank portfolios, and (3) that it would eliminate a free money market. I believe that these objections are fallacious. The new arrangement would create no public responsibilities with regard to bank earnings which do not already exist, but would make existing responsibilities explicit. And what is more important, it would disassociate this responsibility for bank earnings from the control over the volume of private credit—a nexus which under present conditions may easily lead to the tail (earning considerations) wagging the dog (credit control considerations). I am not arguing here that bank earnings are too high or too low, or that commercial banks should get along without a public contribution. I am proposing merely that the latter (in terms of interest payments upon reserve deposits or reserve securities) should be set as a matter of need and not as a matter of credit policy.

With regard to the second objection, note that the new arrangement would imply no interference whatsoever with the composition (as distinct from the total) of such part of bank portfolios as remains in the form of private obligations; and it is with regard to the selection of the latter that banks perform their essential and proper function in the market economy. Nor is the third objection valid. The holding of a large volume of marketable public debt on a voluntary basis does not constitute an essential part of the commercial banking function or of the functioning of the credit market. The ability of commercial banks to unload or purchase large amounts of public debt, on the contrary, interferes with proper quantitative control over private credit extended by commercial banks, and disturbs rather than aids the proper functioning of the private credit market within the framework provided by such quantitative control.<sup>10</sup>

The proposed arrangement, in short, would not destroy any desirable functions of the commercial banking system or of the credit market. It would merely remedy an anachronistic situation—i. e., optional commercial bank holdings, in large volume, of marketable short-term public debt—which, in the first place was permitted to arise only out of a widespread misunderstanding of the nature of the credit system: Whereas the wartime principles of “taxing before borrowing” and of “borrowing outside the banking system before borrowing from the banks” were wholly sound, the principle of “borrowing from the commercial banks before borrowing from the Federal Reserve” was wholly unsound. As is evident to anyone understanding the credit mechanism, it would have been no more inflationary, dollar for dollar, during the war to borrow from the Federal Reserve than to borrow from the commercial banks, given concurrent tightening of reserve requirements. And the resulting postwar debt structure would have been much superior.<sup>11</sup> Indeed, we would then at the outset have obtained the situation which would now be provided for by transforming bank-held debt into mandatory holdings.

##### 5. *The problem of longer term debt*

No such relatively simple solution is available, when we come to consider the bulk of longer term Treasury debt held outside the banking system. Whereas the recent discussion has been in terms of tightening short-term rates only, further and substantial increases in short-term yields (even with a strict supplementary reserve plan) would sooner or later come to be reflected in a tightening of longer term rates. While this result might be delayed, for the time being through a combination of factors, I do not believe that the short-term rate could be pushed above or anywhere close to the present level of longer rates; rather these rates

<sup>9</sup> Note our above principle that higher interest payments are justified if needed to avoid excess liquidity. They are not truly needed here (except under present arrangements), since no desirable economic function is served by large voluntary commercial bank holding of short-term Treasury debt.

<sup>10</sup> The reader will note that the general reasoning underlying this proposal suggests mandatory holding of longer term as well as of shorter term debt when needed, and this is correct. The immediate issue, however, is with regard to shorter term debt because it is this debt which in the first instance is surrendered in favor of competing private debt.

<sup>11</sup> I am aware, of course, of the classical argument that to extend the privilege of direct borrowing is to discard a safeguard against public abuse of bank credit. But though I believe it highly desirable to assure a proper representation in public policy making of the central banking as well as of the Treasury point of view, I do not think that under contemporary conditions the issue of direct borrowing has any bearing on this matter. I cannot see why it would be easier for the Federal Reserve to resist Treasury demand for credit financing by refusing to provide commercial banks with the necessary reserve funds than by refusing to lend directly.

would rise as well. Assuming that we are to look forward to many years of a high-level military budget—and the probability that sooner or later new financing will be needed—it is this aspect of the problem which involves the real difficulty, not the issues raised on the short-term end of the rate structure.

Compulsory holding requirements are less applicable, and on the whole less in order, in the case of nonbank than in the case of bank holders of debt. Moreover, the response to higher interest rates will be less sensitive where the alternative to the holding of public debt is consumption or equity investment rather than holding of other fixed obligations. Finally, the generally recognized need for "maintaining orderly conditions" is more serious in the long- than in the short-term market, due to the greater amplitude of price fluctuation with a given change in yield. While the expansionary effects of supporting the long-term market could again be reduced through a ceiling reserve plan, this would still leave the problem of liquidation on a 1:1 basis. For these and other reasons, I believe that the really difficult problem relates to public policies for medium and longer term rates; the problem of short-term rates can be solved and without substantial cost to the taxpayer more or less easily by the application of supplementary reserve requirements.

Debt management is necessarily a continuous matter, so that policies undertaken now will substantially affect the type of policies which might be available should larger scale financing become necessary later on. Thus I believe it of great importance that a longer range debt policy for "warm" and "hot" war be formulated now, rather than be left to later ad hoc determination.

#### 6. Role of credit restriction

In concluding, I should like to add a few words regarding the role of credit restriction in the general stabilization program. It appears to me that during recent months there has been altogether too much emphasis on the credit approach. In the absence of a more general stabilization program, involving an equitable distribution of military costs by stiffer taxation and a direct tackling of wage-profit-farm income stabilization, credit restriction cannot do more than provide some slight offset to growing inflationary pressures from other sources.

To be sure credit restriction conceivably could be pushed to a point where it could provide a substantial offset to such other forces, but in the process, it would tend to do more harm than good. Special credit controls, while having the advantage of being linked less closely to the public debt problem, cannot be carried beyond a certain point without becoming seriously inequitable; and since one of the main things to be combatted are the inequities of inflation, little would be gained by such a policy. General credit controls (i. e., general restriction of credit availability to private borrowers) similarly cannot be pushed too far without causing disorderly conditions in the public debt market and—basically the more important factor—without choking off essential as well as unessential private credit. And the more exceptions are made in the framework of general credit controls in order to maintain an adequate supply of essential credit, the more does credit policy, in effect, become a matter of direct control.

Proper credit policy is important, but appeal to the magic of general credit control will provide no escape from the starker realities of stiffer taxation and of direct blocks to the wage—farm income—profit and price spiral.

#### STATEMENT OF JAMES J. O'LEARY <sup>12</sup>

I am very happy to have the opportunity to present my views on the recent open-market operations of the Federal Reserve as you invited me to do in your letter of September 22.

In the discussion which follows, I shall govern myself as much as possible by your request that "any statement you might submit should be limited, so far as practical, to the specific implications and long-run effects on Government finances and on stability of the economy in following at this time a policy of allowing interest rates on short-term Treasury issues to rise."

In appraising the recent open-market operations of the Federal Reserve, it is important to think first in terms of the general principles involved. I found myself in virtually complete agreement with the conclusions of the Douglas Subcommittee on Monetary, Credit, and Fiscal Policies. For this reason, and in view of the serious threat of inflation which we face today, I believe strongly that Federal Reserve monetary and credit policy should have as its cardinal objective

<sup>12</sup> Director of investment research, Life Insurance Association of America, New York, N. Y.

the prevention of further inflation and the restoration and maintenance of general economic stability. This means that the Federal Reserve should be perfectly free to utilize its open-market operations in the fight against inflation even though such action may apparently come in conflict with the narrower interests of Treasury finance and public debt management. Because of its relative freedom from political influence (notably demonstrated in regulation X), it is imperative that the Federal Reserve be permitted to use its powers to fight inflation and to play its role in contributing to general economic stability. I feel that at the present stage of our military preparedness program, it is desirable and wise to avoid using direct controls as long as possible, so that we must rely heavily on the Federal Reserve credit powers.

Turning more specifically to the open-market operations of the Federal Reserve which have induced a rise in short-term rates, it might be argued that the net effect of this action has in itself been inflationary. It is true, of course, that in purchasing issues to be refunded by the Treasury, Federal Reserve purchases during the critical period were about \$1,000,000,000 in excess of the sale of short-term governments, so that, ignoring offsetting gold outflows and increases in the volume of money in circulation, about a billion dollars was added to commercial bank reserves. In spite of this situation, however, there can be no denying that in principle the sale of securities by the Federal Reserve has an anti-inflationary effect which was unfortunately nullified by the concomitant need to support the Treasury refunding.

The higher rates on short-term Government securities which the Federal Reserve has been bringing about are desirable for the following reasons. In the first place, a more nearly horizontal pattern of rates on Government securities will reduce the attractiveness for commercial banks to reach out for longer maturities. The pattern of rates which developed in the 1930's and on which World War II was financed has created many problems in the postwar period because it leads periodically to monetization of the debt. Secondly, the rise in rates on short-term Government securities has brought about a rise in short-term open market rates which will have at least a mildly anti-inflationary effect. Thirdly, the open-market policy now being followed has the advantage of increasing the cost to commercial banks of obtaining additional reserves. In this connection, the uncertainty on the part of the banks about the cost of additional reserves has been helpful.

It is easy to exaggerate the anti-inflationary effects of a moderate rise in short-term interest rates. However, to think solely in terms of the effect of higher interest rates seems to me to miss the real point of the Federal Reserve's open-market operations. The real effect, or at least the aim of these operations, is to tighten up on bank credit, which is most desirable at this time. Higher interest rates are merely the product of tighter credit. I feel strongly that the Federal Reserve should have freedom to use open-market operations to tighten credit even though it thereby causes a rise in short-term interest rates with resultant disadvantages to the Treasury.

It is often argued that there is a danger that the Federal Reserve's open-market operations may cause a decline of confidence in Government debt at a time in which the Treasury will have an enormous amount of refunding and possibly new borrowing to carry out. Frankly, I am not very much impressed by this argument for the following reasons: A decline in the prices of marketable Government securities will not affect E, F, and G bonds, except possibly through fear psychosis. Further inflation is much more likely to cause a lack of confidence in the various savings bonds. So far as the marketable debt is concerned, the big bulk of it is held by institutions such as life-insurance companies, savings banks, and commercial banks. Falling prices of Government securities will affect these institutions only if they are required to liquidate a substantial part of their holdings at the lower price levels. I believe I am right in saying that all of these institutions carry Government securities in their annual statements on an amortized-cost basis so that their statements would not reflect the effect of falling Government security prices. Also, I doubt very much whether any of the institutions, and in particular the life-insurance companies, will face a situation where substantial liquidation will be required.

In order to place in perspective what I have said above, I believe that at the present time primary control over credit by the Federal Reserve should be exerted through regulation X and regulation W. Beyond that, however, the Federal Reserve should be free to use its general credit control powers such as open-market operations, changes in reserve requirements, and changes in the rediscount rate. These latter powers, I believe, can and should be used effectively along with the selective group controls to give the Federal Reserve a well-rounded influence over the volume of credit.

STATEMENT OF LAWRENCE H. SELTZER<sup>13</sup>

I am glad to respond to your request that I send you a brief statement of my views on "the specific implications and long-run effect on Government finances and on stability of the economy in following at this time a policy of allowing interest rates on short-term Treasury issues to rise."

## I

I have been unable to discern any useful effects from the increases in short-term interest rates on Government securities brought about in recent months by the Board of Governors of the Federal Reserve System and the System's Open-Market Committee. Other short-term interest rates have naturally risen in sympathy, but without noticeable restrictive effect upon the demand for bank credit. Since June of this year the total of commercial bank loans has increased by more than \$5,000,000,000, the greatest expansion on record for such a period.

It is possible to contend, of course, that the demand for bank loans might have increased even more had interest rates not risen, but it would be difficult to support this contention. For business borrowers, the rise in short-term rates has been an insignificant factor as compared with the profits and protection to be gained, in view of the Korean crisis, by increasing inventories.

Nor do I believe that the increase in yields of short-term Treasury securities has had a significant influence in restricting the disposition of banks to lend. Their large holdings of Government securities have remained available as an easy source of additional reserves, obtainable as and when convenient by selling Treasury issues to the Reserve banks. The yields of 2½, 3, and 4 percent or more obtainable by lending at short term to good customers, and the higher yields obtainable on Government-insured and other sound mortgages have continued to be so much larger than those on short-term Treasury securities that the disposition of banks to expand their credit in these ways, obtaining additional reserves as needed by selling Treasury issues to Federal, has remained little affected by the rise in yields on short-term Governments.

In one respect, at least, it can be justly contended that the Reserve System's actions have had the opposite effect from that intended. By creating heightened uncertainty and instability in the market for short-term Government securities (by these I mean 2- to 5-year, rather than shorter maturities), it has reduced the attractiveness of these securities relative to the higher-yielding customer loans and mortgages. Price stability is an important element of the liquidity for which short-term Governments are prized and for which banks have been content to hold large quantities of them at low yields in the face of the availability of less liquid but higher-yielding customer obligations.

## II

An actual restriction of bank lending power, through a curtailment or limitation of member bank reserves, would certainly have been capable of preventing an undesired expansion of bank credit, and it would doubtless have been accompanied by rising interest rates. The latter, however, would have played a distinctly subordinate and even negligible role. The primary agent would have been the reduced availability of bank credit. Under present conditions, the Federal Reserve System has found it inexpedient—for sound reasons, in my opinion—to adopt this primary means of restricting credit expansion. A rise in reserve requirements and an attempt to absorb member bank reserves further by selling Government securities in the open market from the Federal Reserve portfolio would leave the member banks free to replenish their reserves by selling Treasury securities to the Federal Reserve System. Only if the Reserve System were prepared to allow wide declines in the prices of Governments would this policy be capable of achieving its objective. But the Reserve System is properly concerned with the importance of maintaining orderly conditions in the Government securities market. Wholly apart from the effects of sharply higher interest rates upon the Government's interest burden, the System is properly concerned about the effect upon public confidence of wide declines in the prices of Government securities. Such a concern is unusually acute under present world conditions, in which the possibility of a third world war is a lively possibility. Prevented by these and related considerations from acting directly to reduce the lending power of the member banks, the Reserve System has been trying to employ the feeble shadow of a curtailment in lending power—higher interest rates—to the same end, and with feeble and possibly perverse results.

<sup>13</sup> Professor of Economics, Wayne University, Detroit, Mich.

## III

Theories of central banking policy, like all theories of human institutions, tend to be rationalizations of existing facts and practices, and, even more, of formerly existing ones. The needs, the problems, and the practices move ahead of the theories. Our present banking theories are largely derived from an England of long ago in which short-term foreign bills of exchange occupied such a strategic position in the financial system that the Bank of England was able to accomplish much merely by alterations in its discount rates. Today, we find our own central banking institution reaching to operate through influence over new strategic areas in our financial system—through qualitative control of bank credit, and direct regulation of nonbank credit—via control of consumer credit, construction credit, and margins on securities loans. Government expenditures, taxes, and the size, terms, and forms of the public debt have also assumed a new importance for central banking. But a rational integration of appropriate central banking powers and responsibilities under these new conditions has yet to be made, with the result that inept, inappropriate, and inadequate measures are adopted.

## IV

One step in the direction of a better integrated field for central banking action, which I advocated before the American Statistical Association in 1940 and before the American Economic Association in 1944, is to earmark a large part of the bank-held portion of the public debt as a more or less permanent holding by the banks. By requiring special reserves in the form of Government securities, in addition to the existing lawful reserves, a large and sensitive segment of the public debt can be removed from the fluctuations of the market, and removed also as a virtually open-end source of member bank reserves. The member banks are willy-nilly destined to hold the bulk of their present amounts of Government securities indefinitely. We can continue to keep the banks highly sensitive to fluctuations in their prices, and to permit them to use them as sources of additional reserves even when Federal Reserve policy calls for limiting credit expansion, or we can adopt the more appropriate policy of recognizing these holdings to be more or less permanent, paying a good interest yield on them, but requiring their retention in suitable proportions as additional reserves against deposit liabilities. In one form or another, this method has now been adopted by various other countries.

It should be emphasized that this is a conservative proposal designed to restore effective control of member bank reserves, and, through them, of the total volume of bank credit, to the Federal Reserve Board. Without it I do not see how the Board can regain such control without complete and impractical disregard of the market for Government securities. It is to be noted, too, that the proposal would permit member banks to obtain earnings from additional required reserves that are likely in any event; that the rate on the securities reserves could be set by statute or by the Reserve Board to avoid fear of Treasury prejudice in favor of an unduly low rate; that the proposal could be implemented in any one of various forms to minimize fears of undue restraint upon the individual member banks or of undue power or pressure of the Treasury; and that it could be adopted or implemented gradually, with full allowance for transitional difficulties.

Another step would be to fund a larger fraction of the public debt in the form of redeemable but nonmarketable securities with effective yields varying directly with the period of retention, and so arranged as to favor retention.

Even with respect to the remaining parts of the public debt, it would be well to recognize that in this country, at least, Government securities are regarded as not far removed from money itself, and that any serious impairment of their market value, particularly if sudden, is apt to be highly damaging to public confidence in our money and in the financial condition of the Government.

Even more broadly, it is time that we reexamined the role of fluctuations in interest rates not only as weapons for combating instability, but as in themselves powerful sources of instability.

STATEMENT OF HERBERT STEIN <sup>14</sup>

The report of the Subcommittee on Monetary, Credit, and Fiscal Policies of the Joint Committee on the Economic Report contains an analysis of the problem of monetary control and debt management and recommendations for policy

<sup>14</sup> Associate Research Director, Committee for Economic Development, Washington, D. C.



to be followed in the future. I agree completely with the subcommittee's analysis and recommendations. Although the problem can be approached from many directions it seems to me that the conclusions reached by the subcommittee are inescapable. The heart of the conclusions is in the following sentences from the report:

"Timely flexibility toward easy credit at some times and credit restriction at other times is an essential characteristic of a monetary policy that will promote economic stability rather than instability. The vigorous use of a restrictive monetary policy as an anti-inflation measure has been inhibited since the war by considerations relating to holding down the yields and supporting the prices of United States Government securities. As a long-run matter, we favor interest rates as low as they can be without inducing inflation, for low-interest rates stimulate capital investment. But we believe that the advantages of avoiding inflation are so great and that a restrictive monetary policy can contribute so much to this end that the freedom of the Federal Reserve to restrict credit and raise interest rates for general stabilization purposes should be restored even if the cost should prove to be a significant increase in service charges on the Federal debt and a greater inconvenience to the Treasury in its sale of securities for new financing and refunding purposes."

Since the report analyzes the problem so well I shall not attempt to reconstruct the whole argument but shall only list what seem to me the essential propositions:

1. Restricting the supply of money and availability of credit is an effective and appropriate means to help stop inflation.

2. The way to restrict the supply of money and availability of credit is to restrict the reserve position of commercial banks.

3. In order to restrict the reserve position of commercial banks it is necessary to restrict—limit or reduce—the amount of Federal securities held by the Federal Reserve banks.

4. If the amount of Federal securities held by the Federal Reserve banks is to be restricted there must be some way to induce investors other than the Federal Reserve banks to hold the remainder of the debt. If the total debt (outside trust accounts, etc.) is \$200 billion and the amount the Federal Reserve banks can hold without permitting or promoting inflation is \$20 billion there must be some way to induce investors other than the Federal Reserve banks to hold \$180 billion of Federal debt. If conditions change so that the Federal Reserve banks can hold only \$15 billion without inflation there must be some way to induce other investors to hold \$5 billion more (assuming the total debt constant).

5. There are two basic ways to "induce" investors other than the Federal Reserve banks to hold Government securities. One is by compulsion. The other is by making ownership of Federal securities attractive. A system of compulsion, of forced lending to the Treasury, has serious disadvantages. In any case, such a system does not exist. Therefore Federal securities must be sufficiently attractive so that investors other than the Federal Reserve banks will voluntarily hold the whole Federal debt except for that part which the Federal Reserve banks can hold without permitting inflation.

6. The attractiveness of holding Federal securities must be variable. The amount of Federal securities which the Federal Reserve banks can hold without inflation is variable. The willingness of other investors to hold Federal securities varies with the attractiveness of other uses of funds. In times of rising inflation other uses of funds—notably investment in private equities and debts—become more attractive. At the same time the amount of Federal securities the Federal Reserve banks can hold without inflation declines or at least does not rise. Other investors must be induced to hold more, or at least no less, Federal securities when their willingness to hold Federal securities is declining. Therefore the ownership of Federal securities must be made more attractive.

7. A basic factor in the attractiveness of Federal securities is the interest rate they pay. There are other factors, but none permits such quick, continuous variation in the attractiveness of Federal securities over so wide a range as variation in interest yield.

8. The reason for paying interest on Government securities is to make them sufficiently attractive that the Federal Reserve banks will not have to hold more of the Federal debt than is consistent with avoiding inflation. If inflation were no problem, or if the amount of Federal debt held by the Federal Reserve banks was not a factor in causing or controlling inflation, there would be no reason to pay interest on Federal securities.

9. Low interest is "cheaper" for the Treasury than high interest. It is "cheaper" in just the same sense as a B-17 bomber is cheaper than a B-36. But if a B-17

won't reach the target it is a waste to build B-17's, even though they are cheaper. And if a low interest rate doesn't serve the purpose of inducing a sufficient part of the debt to be held outside the Federal Reserve banks it too is a waste—more expensive to the Nation than a higher rate.

In August and September of 1950 we had as nearly perfect an example as we are ever likely to find of the circumstances in which the principles expressed by the Douglas subcommittee called for monetary restriction, even at the cost of an increase in the service charge on the Federal debt. We were having inflation. The planned rise of military expenditures provided ample reason to believe that inflation would continue if strong action was not taken to stop it. The inflation was being financed by a rapid expansion of bank credit. Any rounded program of inflation control would have included monetary and credit restriction. As a matter of fact, in August and early September general monetary restriction was one of the very few anti-inflationary measures available to the Administration. A rather small tax increase was being debated in Congress and a second tax increase seemed at best months away. Authority to control consumers' credit and housing credit was not yet enacted. We were not then, and are not now, so well supplied with anti-inflationary weapons that we could afford to neglect monetary restriction.

The action taken in August and September did not go so far as would have been desirable. So far as an outsider can judge, this is the result of division of authority and difference of opinion between the Federal Reserve and the Treasury. It would have been desirable to finance the September 15 and October 1 maturities by offering some long and intermediate bonds as well as by offering higher rates on whatever certificates or short notes were issued. Given the decision of the Treasury to issue only 1¼ percent notes and the apparent desire of the Federal Reserve to minimize the expansion of bank reserves, the Federal Reserve banks probably had no choice but to stand ready to lend to the Treasury at 1¼ percent and try to borrow from the market at higher rates.

It is difficult to appraise the effect of the Federal Reserve's action. Bank loans have continued to rise. But no one knows how much more rapidly loans would have increased if the Federal Reserve had not raised the interest rate at which it offers to sell short-term Government securities. Interest rates on prime loans have risen. Probably more important there now seems to be some real uncertainty about the future of interest rates—some expectation that the Government may take further steps to restrict credit expansion, which would involve further increases in interest rates. This expectation leads to some hesitation in extending credit at present rates.

The action taken by the Federal Reserve in August and September was in the direction indicated by the recommendations of the Douglas subcommittee. Yet this action by itself may be relatively inconsequential unless it is followed up by other actions in the same direction. The possibility of getting an adequate anti-inflationary policy would, in my opinion, be greatly improved if the joint committee as a whole, and hopefully the Congress as a whole, would endorse the recommendations of the Douglas subcommittee on this subject.

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#### STATEMENT OF GEORGE TERBORGH <sup>15</sup>

I have your letter of September 22 inviting my opinions on the desirability at the present time of allowing interest rates on short-term Treasury issues to rise.

I take it the issue at present is much narrower than that considered by the Subcommittee on Monetary, Credit, and Fiscal Policies. We are not concerned here with the merits and demerits of the basic policy of pegging the Treasury bond rate; the point is simply whether the pattern of market rates should be adjusted to the preferences of the market, given the peg on the long-term rate. Specifically, should short rates that are obviously too low in relation to the long rate be permitted to find a more natural relationship?

To my way of thinking, the answer is clearly in the affirmative. The net cost to the Treasury of such an adjustment would be relatively small, and it would prevent a continuance of what has recently been going on, the dumping of short Treasury paper into the portfolio of the Federal Reserve System. So long as the Federal Reserve still has long paper to trade with the market for short, the net inflationary effect of such dumping may be negligible, but once the System is out of long paper for trading purposes, it can take additional short paper only at the cost of increasing its total Government portfolio and expanding member

<sup>15</sup> Research Director, Machinery and Allied Products Institute, Washington, D. C.

bank reserve balances *pari passu*. This will aggravate what is already a difficult problem.

I have no illusions that the Federal Reserve System can substantially tighten the money market, and restrict an inflationary expansion of bank credit, while shackled by its commitment to peg the long-term yield on Treasury paper. If bank credit expansion is to be contained it will have to be by other means, such as "jaw bone" campaigns, direct restrictions on certain categories of credit (such as we already have on stock market credit, consumer installment credit, and home mortgage credit) and similar direct methods. Nevertheless, as I have said, the problem confronted by the System should not be complicated and aggravated by a misguided effort to maintain an artificial rate structure on top of the peg on the long-term yield.

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STATEMENT OF DONALD B. WOODWARD <sup>16</sup>

Your letter of September 22, 1950 asks for a statement of what I believe to be "the specific implications and long-run effects on Government finances and on stability of the economy in following at this time a policy of allowing interest rates on short-term Treasury issues to rise."

1. *The question's setting.*—My response is necessarily conditioned by my concept of the environment and the relationship the incidents you mention have to it. My reply may be clearer if those concepts are very briefly made explicit.

The American political economy of our age seems to me to be marked by two transcending imperatives: First, that freedom must be protected from tremendous exogenous threats; and second, that the economy must be protected from the disequilibrium, indeed, the disintegration, of major depression and major inflation. (At the moment the greater danger seems to be major inflation, but emphasis on it alone could cause us to go to extremes; the major preoccupation of analysis with combatting depression between 1929 and 1941 so inhibited balanced thinking as to produce extensive antidepression policies when inflation was the problem.) And major depressions and inflations are occurrences involving credit and money in a great degree, if, indeed, they are not really essentially monetary phenomena.

These two imperatives are intimately interrelated at various levels. They can, and have had major consequences upon each other. Both major inflation and depression have weakened the country's power and consequently its ability to protect freedom, while the struggle to protect freedom has brought about conditions inducing at different times major inflation and depression. In view of these interrelationships, it is important to avoid myopic and partial views when these matters are considered.

During the course of national efforts according with the two great imperatives, two major developments have occurred during the past two decades which, in my opinion, bear with great force on your question. First, the public debt has grown enormously. Second, the value of the dollar as commonly measured by price indexes has fallen by only a little less than half.

The existence of the two imperatives, and the developments resulting from them, have greatly broadened the horizons and increased the depth of the question you ask.

I turn now to your question, which deals both with Government finances and economic stability. Let me first consider the two parts separately.

2. *Government finances.*—The purpose of "following at this time a policy of allowing interest on short-term Treasury issues to rise" (to use your terminology and emphasis) is to curb the inflation manifested for some weeks in rising bank loans, commodity prices, and the like. "The specific implications and long-run effects on Government finances" of such a policy depend preponderantly upon whether inflation is likely to be curbed by the policy followed.

It is traditional central bank and orthodox economic theory that rising interest rates penalize and dissuade those considering expansion of their businesses and also result in increasing saving and curtailed consumer demand; all this is supposed to operate in part directly from rising short-term rates, and in part from the effects of rising short rates on long-term rates (and the opposite effects are had from declining rates). This inhibiting effect supposedly is felt on the private sector of the economy and presumably, though this has been less clearly developed, on the public sector as well. This view of the functioning of rising (or falling) rates has long been and still is vigorously challenged as unrealistic and contrary to much available evidence; on the other hand, it has been supported by argu-

<sup>16</sup> Second Vice President, the Mutual Life Insurance Co. of New York.

ments of marginal economics and an array of evidence of the association of rising interest rates and the ending of booms. The evidence does not appear to validate either point of view conclusively.

But there is another consideration. The policy of raising interest rates to curtail inflation is now being followed in a new environment: The public debt has grown large. When Mary's little lamb grows to a size far surpassing an elephant, can it appropriately be treated any longer as a little lamb? If Mary does so, may she not be endangering the house she lives in, the school house, the lives of her schoolmates, the teacher, and herself? Rising short-term interest rates produce rising medium-term and longer-term rates, and rising rates mean declining prices of Government securities. Many holders of Government securities have been encouraged to believe that no one could take a loss on these issues; though, of course, no contract or commitment exists that prices will never go down. There is a risk that falling Government security prices, with below-par quotations for a number of issues, may make for dissatisfaction among holders, with consequent sales (or presentation to the Treasury for redemption of demand issues) and declining willingness to invest in such issues in the future.

The present is a very unhappy time for such a question to be raised. The present is just on the eve of a period of years in which the vast amount of 10-year securities sold to finance World War II must be refinanced, when the volume of short-term debt is large, and when international conditions might require new and sizable deficit financing. During the next few years the Treasury must find buyers for literally many hundred billions of dollars of Government issues. If prospective buyers question the attractiveness of the paper, then the banking system including the Federal Reserve, will of necessity become the buyers, because it is inconceivable that the Treasury would be left without necessary funds. In that event, the money supply would be substantially increased, and this would be inflationary. The possibility, therefore, exists that very much of a rise in interest rates at this time might prove to be inflationary rather than anti-inflationary as intended, because of the change in the environment from the times when traditional central banking and orthodox economic theory were formulated.

But there is another aspect to the matter. Inflation, i. e., loss of purchasing power by the dollar, may also cause a diminution in willingness to hold promises to pay dollars in the future. Inflation already has raised questions about the desirability of holding Government securities, and the further inflation proceeds, the greater may be the Treasury's difficulty in doing the refunding and financing it has to do in the next several years. And in addition, inflation increases the cost of the goods and labor the Government buys and so increases necessary outlays.

Viewing these various aspects of the matter, I conclude that the most important consideration to Government finance is that inflation be halted. If it is not, I judge that the Treasury is likely to experience considerable trouble during the next several years. This conclusion can be reached with confidence however one may feel about the efficacy of changing interest rates as an anti-inflationary technique. I shall return to the question of technique later. But it should also be noted that serious deflation, which does not now seem likely for a long time to come, would also be quite harmful to the Treasury, and its prevention as well as that of inflation, should be part of the continuing objective.

For purposes of completeness, I should add two points to these comments on Government finances. First, higher interest rates mean that the Treasury will have to pay a higher interest cost than would otherwise be the case. Second, rising short-term rates mean that longer term issues are made less attractive to buyers relatively, so that any refunding of short paper into longer paper by the Treasury is made more difficult. But these are evidently of subordinate importance to the larger question just developed; and the higher interest cost argument has been tremendously over exaggerated.

3. *Economic stability.*—The chief "specific implications and long-run effects \* \* \* in the stability of the economy in following at this time a policy of allowing interest rates on short-term Treasury issues to rise" also relate to inflation control.

The time which has elapsed since the rise in rates was started has been very short, and the phenomena which have appeared can properly only be noted for consideration along with subsequent events which will provide greater perspective. Subject to this treatment are two items: (a) The Federal Reserve, in the weeks since the interest rate rise was started, has had to buy about \$1.2 billion of Government securities to maintain orderly market conditions; and during the period has turned from a seller of long-term issues to a buyer. (b) During this time the commercial loans of the commercial banks have continued the rise which was under way prior to the action, and the total of such loans outstanding has reached

a new high level for many years. These developments do not indicate immediate success in credit curtailment, and they raise the question whether limited increases in interest rates in the new environment of the vast public debt have any effect on the ability or willingness of the banks to accommodate their customers. Is the availability of credit significantly affected?

Yet such questions should not in any way obscure the fact that the interests of economic stability just as the interests of Government finance require that inflation be halted, that if the decade of the 1950's is marked by any such robbery of the dollar as was the preceding decade, the United States will be harmed economically, and as well politically, internationally, socially, morally and spiritually. And they should not mask the extremely intimate relationship between inflation (and depression) and monetary and credit developments.

4. *What conclusion?*—The territory over which we are now traveling is so new as to make evidence scanty and dogma dubious. Tentatively, and rather gingerly, I would advance the following hypotheses for consideration:

(a) Realization of this country's twin objectives of freedom and prosperity in an environment including the large public debt and an already seriously depreciated dollar require careful fiscal policy and operation and more extensive, skillful, and successful monetary management than ever before; and it is more true perhaps than at any previous time that "money will not manage itself."

(1) To the degree that monetary management and fiscal policy are inadequate or fail, the country probably will resort to direct price control, allocation and rationing. These deal only with the results of inflation, which they may suppress for a time; but they cannot prevent or cure inflation. While they may be necessary in great national emergency, they cannot be used over any prolonged period of strain, and the attempt to do so would be catastrophic.

(b) The necessity for effective monetary management means that every possible technique and device should be utilized.

(1) A rigorous pay-as-you-go fiscal policy in inflationary periods, with strictest curtailment of public expenditures not absolutely essential, and a tax policy designed to stimulate production which is itself a major inflation control, is an essential procedure to prevent further aggravation of the already serious monetary problems.

(2) The central bank should be given and encouraged to seek the greatest possible latitude of operation consistent with the objective of economic stability. Developments during the weeks since a policy of allowing interest rates on short-term and to a degree, other Treasury securities to rise was adopted, have provided no conclusive evidence of the efficacy of that policy in halting inflation, which is its objective, and broader considerations also leave the question subject to controversy. This does not mean that the policy should be abandoned, nor even that it should not be pursued further, but it does mean that the operation carries sizable risk to Government finance and economic stability and should be very cautious.

(3) Because monetary management is so vital, and because the traditional techniques are so inhibited, the development of new techniques and devices is extremely urgent. Some selective credit controls have been utilized in recent years, e. g., consumer credit and stock market credit, and now mortgage credit. And public debt management has been utilized a little for monetary management purposes. I believe that both these areas could be utilized much more effectively and extensively for and by monetary management, and so deserve more attention.

The Joint Committee on the Economic Report can most appropriately and usefully pursue this subject. The committee has a great opportunity to perform a significant public service.

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## APPENDIX I

### THE TREASURY-CENTRAL BANK RELATIONSHIP IN FOREIGN COUNTRIES—PROCEDURES AND TECHNIQUES

The conflict between the public debt and central banking has occurred all over the Western World. This is a natural outcome of the large growth of public debts during the war. Officials responsible for public-debt management have been anxious to maintain stability to maintain confidence in the debt, and to facilitate refunding. The result has been that central banking techniques have been severely hampered. Foreign experience shows considerable ingenuity in attempting to solve the problem of permitting central bank functions to operate in spite of the existence of large public debts. These techniques have obviously been

evolutionary and many of them are apparently undergoing a further change even now. This suggests that there is no easy answer to the American problem but that further efforts should be given to working out methods of reconciling a large public debt with central bank objectives of influencing private credit.

In the hope that foreign experience would throw some light on the problems in this country, the committee staff requested of the Federal Reserve Board preparation of the following catalog of relations, procedures, and techniques used in other countries.<sup>1</sup>

#### GENERAL INTRODUCTION

This report is prepared in response to a letter from the chairman of the Joint Committee on the Economic Report requesting a survey of foreign experience in the field of treasury-central bank relationships.

Almost all countries have central banks, and in all cases these institutions are separate and distinct from the treasury departments of their governments. The function performed by central banks in all countries is to regulate the supply of money in such a way as to serve national interests. Activities of central banks, designed to influence or control the availability of loan funds, necessarily affect interest rates paid by private and governmental borrowers. Conversely, actions designed to affect interest rates have repercussions upon the supply of credit. Because of the great importance of public debts in the financial structure of most countries, the need for coordination between monetary and credit policies on the one hand, and public-debt management and fiscal policies on the other, has been recognized in almost all countries. Methods of working out a harmoniously functioning relationship between treasury and central bank have varied widely. There is wide diversity also in the devices adopted in foreign countries to restrict the over-all supply of credit within the framework of policies which take account of large-scale financing needs of treasuries.

This survey of foreign experience is designed to provide background material for the study of problems of monetary policy in the United States. It will be immediately apparent, however, that devices which may have worked well in foreign countries may not be suitable here. Differences in political, economic, and financial structure between the United States and foreign countries as well as among the foreign countries themselves are so profound that a comparison of national monetary policies serves primarily to bring into sharper focus the peculiarities of national problems.

To illustrate this point, it may be well to review briefly some of the principal differences in underlying conditions among the countries whose experiences will be described below and between them and the United States.

Differences in economic structure and development are possibly most important in accounting for the lack of comparability of treasury-central bank relationships among various countries. Thus, in countries where there are highly developed money and capital markets, issues concerning monetary and debt management policies tend to revolve around questions of the interest rate structure, since the rate structure affects on the one hand demand and supply factors in the money market and on the other the rates at which the treasury can place its obligations with investors other than the central bank. But in countries where the central bank is the principal source of funds for financing government deficits, market rates of interest are of less importance for debt management; in these countries agreement must be reached as to the amounts that can be advanced by the central bank to the treasury in view of the unstabilizing effect of these advances on the economy. Again, in a country where hyperinflation or currency reform has virtually wiped out the public debt, monetary problems are of a different nature from those characteristic of a country where the public debt is large in relation to national income and is widely dispersed among both bank and nonbank holders.

Wide differences among the various types of banking systems must also be recognized. Credit control techniques that are adequate in a country with a highly centralized multiple-branch banking system, in which bank policies can be influenced by direct contact and suasion, may be of little help in a country whose banks are numbered in the thousands. Also, differences in banking traditions and attitudes, such as the extent to which banks are willing or reluctant to hold long-term government securities, or to borrow from the central bank, may mean that policies that are effective in some countries will not work elsewhere.

<sup>1</sup> The following report was prepared by the staff of the Board of Governors of the Federal Reserve System. It does not necessarily represent the views of the Board. It is based on available information obtained in part from published documents and in part from personal contacts with foreign central banks developed over a period of years. The accuracy of the information has not been checked by the officials of the foreign countries concerned and is not guaranteed by the Board.

There are also important differences between countries in the political relationship between legislature, treasury, and central bank. The great size and diversity of the United States and of its economy has led to the establishment of twelve separate Federal Reserve banks, which are partly autonomous but are placed under the general supervision of the Board of Governors, appointed by the President and responsible to Congress. The Federal Reserve banks carry on the operations ordinarily performed by central banks while general policy decisions, which in most countries are also made by central banks, are vested largely with the Board of Governors and with the Federal Open Market Committee, which is also established by statute. Thus the central banking system in this country receives its mandate directly from the Congress and is directly responsible to it. It does not operate under or report to a member of the Cabinet. The Treasury, on the other hand, performs its function of debt management as a part of the executive branch, which, under our form of government, is separate from the legislative authority.

Foreign central banks have varying degrees of autonomy or independence from the government, but the tendency in recent years has been to bring them into the orbit of governmental responsibility. Effective coordination of treasury and central bank policies affecting the supply, availability, and cost of money is simplified in European and some other countries by the existence of a parliamentary form of government. Under that form, the government in office is directly responsible to the parliament. Actions and policies of the government (cabinet) are subject to constant review by the parliament. In turn, the minister of finance, a member of the cabinet who generally exercises not only the debt management function but also budgetary and other broad economic powers, has in some countries been given a degree of authority with respect to the central bank. Thus the central banks in these countries have been made indirectly responsible to parliament through the minister and cabinet.

These differences in political, economic, and banking structure make clear the need for caution in drawing conclusions for any one country from policies and techniques which may have proved effective in other countries. Nevertheless, a review of foreign experience can be valuable in placing national problems in proper perspective. For instance, one fact brought out by the survey is that, while some 20 years ago the American banking system was considered as among the most formalized by rules and regulations, this is no longer the case today. Under the most diverse political regimes, democratic countries have adopted measures such as cash and supplementary reserve requirements, selective or qualitative credit controls, differential interest or discount rates, bond limitation plans, etc. While this experience does not yield any specific lesson as to the controls that ought or ought not to be adopted in the United States, it suggests that monetary controls compatible with democratic institutions may take a variety of forms.

Procedures adopted by foreign countries to coordinate central bank and treasury (or governmental) policies are summarized in the following paragraphs. Subsequent sections briefly survey the main issues faced by postwar monetary policies and the various means recently employed abroad to deal with the specific problem of restricting the over-all supply of credit under conditions of large-scale financing needs of treasuries and of large holdings of government securities by different economic groups.

#### THE TREASURY-CENTRAL BANK RELATIONSHIP

At one time, most central banks were chartered by the legislature to operate independently, within certain limits, not only of the treasury, but of the highest executive and legislative authority of the nation. As the ultimate guardian of the value of the nation's currency, the central bank was bound by the strict rules of the gold standard. Its assets were confined largely to commercial paper, and its holdings of government securities were limited either in practice or by law. At that time, it was felt that the high public interest served by the central bank required that it operate free from government intervention and that this freedom was best safeguarded by the establishment of the central bank formally as a specially chartered private institution under the gold standard.

Today, in practically all countries, as in the United States, it is felt that the public functions performed by central banks require that they be established frankly and formally as public institutions. Many countries have worked out techniques which recognize the separate responsibilities of central banks and treasuries in their respective fields and at the same time facilitate the development of coordinated fiscal and monetary policies.

While central banks are practically everywhere considered a part of the governmental structure, the position of the central bank within this structure is a special one. Although ordinarily governmental appointees, present-day central bank officials are often appointed for relatively long terms of office. It is generally recognized that the men to be appointed to these posts should be willing to take a strong position for the maintenance of monetary stability and that the institutions which they direct must have a measure of independence within the governmental structure. Distinction is also generally maintained between the functions and responsibilities of the treasury as budget maker and borrower and those of the central bank as regulator of the supply of credit.

There is a wide range of variation in types of legislative framework governing the relation of central banks to their governments. The actual nature of the relationship depends, in addition to provisions of law, on many factors of custom, tradition, and personalities.

In a few countries, including the United Kingdom, Australia, and India, the statutes give the Ministers of Finance the ultimate power to direct the policy decisions of the central bank. Similar legislation was formerly in effect in New Zealand. Even where the central bank in its policy-making functions is subordinate to the Minister of Finance, the central bank is not considered as a bureau or office in the Ministry. According to the statutes of these countries, instructions from the Minister of Finance must be preceded by full consultation with the central bank, whose policy-making officials are expected to have independent views.

There are also many countries where the Minister of Finance is the chairman or is one of the members of the central bank's board of directors. This arrangement has been advocated on the ground that it would provide to the Minister of Finance and to the central bank an opportunity for a full and mutual presentation of their views. However, it has been opposed on the ground that it might lead to undue influence of the treasury on central bank policies.

A number of countries have adopted the device of a national council which is charged with the formulation of national monetary and credit policy and includes, among others, the Minister of Finance and the head of the central bank. Examples are the National Credit Council in France which has advisory functions and the Interministerial Committee in Italy which is a policy-making body.

A few countries have specific machinery for appeals to an arbiter in order to resolve treasury-central bank differences. In the Netherlands, while the Minister of Finance has authority to give directions to the central bank, the governing board of the bank has the right of appeal to the Crown in case of disagreement. In New Zealand, while the central bank is no longer subject to direct treasury instructions, it is specifically subject to directions by resolution of Parliament. One of the proposals made in 1950 in Germany would provide for a federal committee to resolve conflicts.

In the many countries where there is no statutory provisions for resolving differences in viewpoint between fiscal and monetary authorities, it would appear that in practice disagreements are referred, as a last resort, to the head of the government. As a matter of fact, even where some governmental agency is designated by statute as the final authority on monetary policy, the head of the government of the country can, in practice, assume this authority, particularly when he holds broad powers of appointment and removal. The finance minister, by virtue of his closer political and personal ties with the head of the government and of his attendance at cabinet sessions, may be in a favorable position to obtain a settlement in favor of the treasury view. But, as previously explained, in most democratic countries, cabinet decisions are subject to parliamentary control.

Determination of monetary policy is bound to be greatly influenced by the personalities of the officials concerned—as well as by the state of public opinion.

The fact that the head of the central bank is not a member of the cabinet gives him a certain degree of independence from political pressure and hence a special position in the eyes of the public, and where the governor is a man of outstanding personality the central bank may acquire an influence far beyond the actual powers given to the bank by legislative provisions. Also, in many countries the public standing of central banks derives largely from the prestige that they may have acquired over a long period and from their ability to attract qualified personnel. Therefore, the government currently in power would ordinarily be anxious to avoid the shock to public confidence which might result from public conflict between it and the central bank authority.



Besides formal provisions for coordination of fiscal and monetary policies, various informal techniques have been developed to insure a cooperative relationship between the agencies involved. One technique which has been employed in a number of countries is that of frequent meetings of technicians from the treasury and the central bank. Another is that of interchange of technical personnel. Such practices have contributed to a better understanding of common objectives, and hence to the development of complementary rather than conflicting measures.

#### MONETARY POLICIES IN THE POSTWAR PERIOD

The problem facing most foreign countries in the postwar period was, in its most general form, that of reconciling monetary stability with the requirements of reconstruction and development. This problem often led ministers of finance and central banks to adopt similar positions toward programs of the so-called spending ministries. At the same time, the existence of large public debts and liquid assets at the end of the war gave rise to a special problem of restoring effectiveness to traditional instruments of monetary control. The problem of coordination of debt management policy and credit policy took various forms, depending on the distribution of ownership of long-term and short-term debt among the banks and other holders, and depending on the rate of expansion or contraction of the government debt.

An important new factor in the postwar monetary situation of many countries was the existence of large public debts which had their origin in war and occupation expenditures. In many countries a large portion of the debt was held by the central bank and had therefore already become monetized by the end of the war. In these countries effectiveness of credit restrictions was likely to be limited by the abundance of liquid funds in the hands of individuals and businesses. Where direct controls had prevented these funds from exerting their full effect on prices and incomes, attempts were made to absorb these funds before they would result in open inflation. This was done in some cases through currency reforms which involved reducing the value of holdings. Import and budget surpluses also had important anti-inflationary impacts.

In countries where the liquid funds had "broken out" and had started open inflations, instruments of credit control had greater applicability, since in those countries private credit expansion played an increasingly important role in stimulating and supporting the inflationary process fed by budgetary deficits. The French and Italian postwar inflations were stopped in part by recourse to cash and supplementary reserve requirements which placed limitations on the availability of bank credit and thereby reinforced the effect of market interest rates as credit control instruments. Under the conditions prevailing in these countries, reserve requirements had a dual purpose of channeling to the Treasury a portion of the commercial banks' funds so that direct financing by the central bank could be minimized, and of preventing private credit expansion which might have resulted from the sale of bank-held securities to the central bank.

In countries where, at the end of the war, the public debt was not primarily held by the central banks, but was widely diffused among the public and the banks, there arose the problem of preventing its monetization. Many countries attempted to deal with this problem in an indirect way, using price controls and investment controls to make it difficult for banks and individuals to use the funds they might have obtained by encashing government securities. Under these conditions, the incentives to liquidate securities were considerably weakened. In addition, through statutory provisions, or by informal agreements, some countries froze a portion of the short-term government securities held by the commercial banks. Moreover, while many countries endeavored to stabilize short-term interest rates, only a few countries actually increased the money supply through active support operations in the long-term market. Sweden, one of the few important countries where long-term rates were pegged until very recently, has now adopted a policy permitting greater flexibility in the market for long-term securities.

With the new inflationary pressures caused by the Korean developments, many countries have adopted positive monetary policy measures as their first line of defense in the new circumstances. In recent months discount rates have been raised in various countries, frequently for the first time in several years. At the same time, more countries have adopted reserve requirements, both primary and supplementary, as a means of combating inflationary credit expansion.

This current reliance on monetary policy is primarily explained by the hostility of public opinion in most countries against a return to direct controls of raw material allocations, prices, wages, and of consumer rations. These controls were a

universal legacy from World War II and many countries are still in the process of dismantling them. Moreover, it is now widely believed that fiscal and monetary controls are superior to direct controls in dealing with the dangers of inflation in the present situation, particularly since the rearmament effort does not at present involve total mobilization and since it is likely to extend over a protracted period.

#### SPECIAL MONETARY TECHNIQUES

A technique of monetary control which has been applied in a number of countries has consisted in requiring banks to hold cash and/or government securities in amounts related to their deposit liabilities. These measures were not substitutes for the action of interest rates in influencing the supply of and demand for funds, but actually served to reinforce this action.

In some cases the permission to count government securities as legal reserves applies to the standard reserve requirement and in other cases it applies to a special additional requirement. The purposes and functions of these regulations have varied from country to country and within any given country their effect may change over time. In some cases this technique has been used to place a barrier in the way of banks' increasing their loanable funds by selling securities to the central bank. This was in part the immediate purpose of the reserve requirements introduced in the postwar years in Belgium, Italy, France, and Sweden. These requirements, however, could also be called upon to serve the quite different purpose of facilitating deficit financing through automatic absorption by the banks of government securities. Other uses of this general advice have occurred in the Philippines (to promote development of a local investment market), in India (as a cushion for a large increase in reserve requirements), and in Mexico.

In Mexico a system of secondary reserve requirements has been employed for the purpose of exercising influence over the kinds as well as the aggregate of bank lending; besides Government securities, other types of loans which the authorities wish to promote are included among assets fulfilling these reserve requirements. The percentage of deposits required to be held in these forms is fairly large.

A related device that has been used in a number of countries is that of imposing differential reserve requirements which require commercial banks to hold especially large reserves against increases in deposits. This device permits the imposition of high reserve requirements on expanding deposits while at the same time allowing for the fact that individual banks may vary greatly in their holdings of cash or acceptable assets at the time when the requirements are introduced. The Australian "special accounts" procedure is an outstanding example of this. Among other countries making use of this principle have been France, Italy, and Mexico.

The quantitative controls outlined above have, in general, been applied by means of general regulations (in terms of ratios) for all banks or groups of banks to follow. There have been a few cases, however, where actions of the authorities have resulted in curtailing directly the amount of reserves available to individual banks for the purpose of private lending. In the United Kingdom, the treasury determines every week the total sum (if any) which the banks are called upon to invest in a nonnegotiable, nontransferable treasury obligation called treasury deposit receipt. In France, the central bank controls the reserves of the banks not only through reserve requirements, but in addition by imposing individual ceilings on the amounts of commercial paper which each bank can rediscount.

In addition to these various types of quantitative restrictions, a wide variety of qualitative measures has been tried in different countries. The system of reserve requirements in use in Mexico, referred to above, has qualitative as well as quantitative aspects. Various countries including France and the Netherlands have tried procedures whereby the making of each loan (above a certain minimum size) would be subject to the specific approval of the central bank. It was found, however, especially in France, that it is very difficult to determine and apply the criteria for the selection of individual loans by a central bank. Thus, although such a control could theoretically be extremely effective in limiting private loans, both France and the Netherlands eventually turned to systems making greater use of quantitative controls.

A special device consisting of a quantitative limitation on the amount of long-term government bonds that a bank may hold, with special provisions as to the maturity distribution that may be permitted, was introduced in Canada. This was used to prevent banks from taking undue advantage of the pegged rate on long-term government bonds.

Finally, moral suasion is an instrument to which all central banks resort at times. In some countries where acceptance of financial leadership of the central bank has become tradition, the instrument of moral suasion has been an important one; in particular, it has been an instrument well suited to the set of institutions and circumstances existing in the United Kingdom. In Canada, it may be noted, the limitation on bond portfolios was contained in agreements with the commercial banks which resulted from suasion rather than from legal backing.

As has already been indicated and as will be shown in greater detail in the individual country studies, success of the various monetary control techniques described above has varied among different countries. For instance, the combined cash and security reserve requirements appear to have fulfilled their purposes in a number of European countries but the essentially similar "special accounts" procedure adopted in Australia has been unable to stem serious inflationary developments in that country. Similarly, qualitative control of bank credit does not seem to have been an effective tool in countries like France and the Netherlands whereas it has given satisfactory results in the United Kingdom and Canada. This difference in effectiveness of similar measures has resulted from differences in accompanying circumstances and in basic characteristics of the countries involved; it thus illustrates the importance of careful consideration of differences in tradition and environment before transposing any specific technique from one country to another.

#### COUNTRY STUDIES

In the following, no attempt is made at an exhaustive description of monetary policy or of monetary policy formation in all foreign countries. Attention has been focused on those instances where either institutional devices concerning monetary policy or the policies themselves appeared to be of general interest. As a result, for some countries only the institutional relationships are covered, while for others only the monetary policies and techniques are reviewed.

#### UNITED KINGDOM AND COMMONWEALTH COUNTRIES

##### *Institutional arrangements*

Statutory arrangements for the coordination of monetary policies between the central banks and the Government have recently been put into effect in several countries in the Commonwealth, in most instances by labor governments which wished to insure that the powers of the central bank be so used as to support the full employment policies of the Government.

*United Kingdom.*—The Nationalization Act of 1946 formalizes for the first time in history the relations between the Bank of England and the treasury. The statute now provides that "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." The significance of the qualifying clause "after consultation with the governor of the bank" has been emphasized by commentators, especially after the governor stated in the House of Lords that the words "were inserted at my request and received cordial agreement from the treasury." This clause, therefore, is designed to insure that the governor would participate in policy discussions with the treasury or, at least, have the right to be heard before a decision to issue directions to the bank will have been reached.

The new legislation in reality brought about no fundamental change in the relations between the Bank of England and the treasury. The treasury's power to give direction to the bank has not yet been exercised so far as is known. Rather, a high degree of voluntary cooperation and informal consultation continues to characterize the relationship among the various segments of the British financial organization.

*India.*—Amendments to the Reserve Bank of India Act in 1948 included a provision almost identical to the one, quoted above, which formalizes the relation between the Bank of England and the United Kingdom Treasury. The Indian Government's power to give direction to the reserve bank has not been exercised so far as is known. There is some evidence that in 1946-50 the reserve bank favored an increase in interest rates from the low levels previously reached. Actually a very gradual rise in long-term rates did occur during these years. Whether or not there were differences on policy between the reserve bank and the Government, the close consultative relationship between them was unimpaired.

*New Zealand.*—The Labor Government of New Zealand in 1936 amended the Reserve Act to provide that "it shall be the general function of the reserve bank \* \* \* to give effect as far as may be to the monetary policy of the Government." Reserve bank subordination to the Government was made

absolute in an amendment in 1939 which required the bank "to give effect to any decision of the Government conveyed to the governor in writing by the Minister of Finance." Amendments introduced in July 1950 by the recently elected Conservative Government, however, restored a substantial measure of autonomy to the reserve bank. The bank is now "responsible for taking such steps within the limit of its powers as the bank deems necessary or desirable" to promote internal price stability and the highest degree of economic activity that can be achieved by monetary action. More significant, the bank is no longer required to carry out written treasury instructions; the amended act provides instead that "the bank shall give effect to any resolution of the House of Representatives in relation to the bank's functions or business."

*Australia.*—The Australian Labor Government in 1945 set up elaborate machinery to resolve differences of opinion on policy questions. The subordination of the Commonwealth Bank to the Treasury Department provided for in the Commonwealth Banking Act of 1945 was the product of the Prime Minister's expressed view that, during the depression of 1929–33, "the bank was used by reactionary interests for a purpose directly opposed to the welfare of the Australian people and in opposition to the will of the Government of the day." Under this act the bank is to inform the treasurer from time to time of its monetary and banking policy; where disagreements develop which cannot be resolved by direct conversation, the treasurer may "inform the bank that the Government accepts responsibility for the adoption by the bank" of a Government-approved policy. The bank must then give effect to that policy.

Consideration is now being given in Australia to new legislation which would eliminate the subordination of the Commonwealth Bank to the treasury. Under the terms of the proposed amendments, the management of the bank would be restored to a board in place of a single governor and Parliament would become the final arbiter of any unresolved differences between the bank and the treasurer.

*South Africa.*—The Reserve Bank Act of South Africa makes no formal provision for consultations on questions of monetary policy between the bank and the treasury. It appears that the bank enjoys a considerable degree of autonomy in its operations.

*Canada.*—Arrangements between the Bank of Canada, which was established in 1935, and the Department of Finance are not formalized in the pattern found in New Zealand, Australia, and Great Britain. While the Bank of Canada is Government-owned and under a board of directors which is entirely Government-appointed, it is not subordinated to the treasury; it appears to occupy a role within Canada similar to the role of the Reserve Bank within South Africa. The relations between the bank and treasury appear to be marked by informality in the British tradition and by cooperation in the formulation of monetary policy.

#### *Monetary policies and techniques*

*United Kingdom.*—The treasury deposit receipt system, introduced during the war as an emergency financial instrument, has been the principal means used in the postwar period to supplement more traditional central banking techniques in bringing about monetary stabilization in Britain. Under this system, the treasury borrows directly from the commercial banks; the latter receive a deposit receipt as evidence of a treasury obligation which is neither negotiable nor transferable. Each Friday the treasury announces the total sum (if any) that is to be called from the banks against deposit receipts, leaving to the clearing and Scottish banks responsibility for establishing quotas for individual banks. The commercial banks meet their weekly quotas; the only discretion left to them is to choose the day during the following week on which the funds are to be passed over to the treasury. The effect, therefore, is in some respects similar to that of an extra reserve requirement which is subject to weekly adjustment; however, only a portion of the banks' holdings of floating debt consists of treasury deposit receipts since the banks also have continuous maturities of treasury bills in their portfolio.

The deposit receipt system has also facilitated the maintenance of very low interest rates for short-term treasury borrowing; a freeze on short-term rates has been effectively maintained since 1946 despite the appreciable rise in long-term rates during this period.

In unofficial quarters, a proposal has been made which would permit a return to flexibility in the short-term market without an undesirable rise in the interest charges on the large floating debt.<sup>2</sup> Under this proposal, the bulk of existing treasury bills would continue to be held at the present low rates while rates on

<sup>2</sup> F. W. Paish, "Prospects for Interest Rates," London and Cambridge Economic Service, February 1950, p. 14.

net new treasury borrowing and on all commercial paper could be allowed to fluctuate and to rise. There has been no indication, however, that official support has been forthcoming for this proposal.

Neither during the cheaper money drive between 1945 and 1947 nor during the period of disinflation from 1947 to date has the maintenance of monetary control by the Bank of England been threatened by monetization of the debt through commercial bank sales of marketable debt to replenish reserve funds. Until the middle of 1949, the bulk of the clearing banks' holdings of floating debt was held as deposit receipts which are not marketable.

The commercial banks were restrained from switching into long-term bonds both by strong tradition against long-term holdings and, after 1947, by the possibility of fluctuations in money rates and bond prices. The risk factors inherent in holding long-term securities were clearly demonstrated by the decline in bond prices during the second half of 1949 during which yields rose by over one-half percent. In addition, moral suasion has been a peculiarly effective central banking technique in Britain, due to the combination of the traditional prestige of the Bank of England, the concentration of resources in the British banking system, and the desire on all sides to avoid more stringent control measure. Through the treasury deposit receipt system, open market operations, and through moral suasion the British monetary authorities have been able to retain the initiative in controlling the credit base of the clearing banks throughout the postwar period.

Although Britain underwent a sharp expansion in credit between 1945 and 1947, this was attributable directly to the budget deficit and to the monetary policy pursued by the authorities in support of the cheaper money drive, and not to the lack of appropriate instruments of monetary control. From the middle of 1947, there has been fundamental agreement between the treasury and the Bank of England on the desirability of avoiding either expansion or contraction of bank credit, and this policy has been effectively implemented by a close coordination of treasury and Bank of England operations in the money market.

A further technique for control of bank lending has been the use of qualitative standards to insure that banking resources are used only for appropriate purposes. The Capital Issues Committee, established during the war and continued during the postwar period, had responsibility for approving flotations of new issues for industrial expansion. The criteria enunciated for guidance of this group are communicated to the commercial banks for guidance in approving new business loans. In addition, an amendment introduced in 1946 provided specifically that all bank loans in excess of £50,000 must be approved by the Capital Issues Committee.

*Australia.*—The Commonwealth Bank has used both quantitative and qualitative controls in carrying out the responsibility to determine the lending policies of the commercial banks delegated to it under the Banking Act of 1945. The special accounts procedure, introduced as a wartime expedient in 1941 and incorporated into permanent legislation in 1945, has been the principal quantitative technique used by the Australian authorities to replace the more traditional central banking devices of monetary control. Under this arrangement, the commercial banks are required to maintain in special accounts at the Commonwealth Bank the proportion of new assets in Australia stipulated by the bank. During the war, virtually all increases in deposits of each commercial bank in excess of deposits in August 1939 were impounded in these accounts. From mid-1945 to mid-1948, only 45 percent of new funds was called up by the authorities; the proportion was increased somewhat after July 1948, however, as the large balance-of-payments surpluses in 1948–49 and 1949–50 intensified internal inflationary pressures.

The Commonwealth Bank stated that the growth requirements of the economy would be financed by releases from the special accounts and that the authorized volume of such releases would be such as to support a level of bank lending deemed appropriate by the authorities. It was also made clear that the banks were expected to adjust their operations so as to conform to this general level, although short-term loans from the Commonwealth Bank could be obtained by those commercial banks urgently requiring cash.

The Commonwealth Bank has also established qualitative criteria to govern commercial bank lending. These criteria, which are issued in the form of enforceable directives to the banks from time to time, are generally designed to insure that available bank lending will be used for essential purposes and that bank lending will not add unnecessarily to the existing inflationary pressures on resources. In addition, the banks have been requested to refrain from financing capital expansion.

Neither the radical character of the special accounts procedure nor the qualitative control over types of bank lending has been able to prevent the appreciable monetary expansion and sustained inflation of prices and incomes which Australia has undergone in the postwar period; these developments, however, should not be traced to domestic private credit expansion, but to the large-scale immigration and investment programs, to the booming world prices for certain major export commodities, and to the massive inflow of foreign funds for both investment and speculation which have characterized the Australian economy over the past few years.

*Canada.*—In 1945-46, the Canadian monetary authorities continued their wartime policy of supporting the prices of long-term Government bonds. Although the price of Government bonds was not rigidly pegged, commercial banks moved into long-term Government securities in an attempt to expand earnings; however, as a result of the Government's debt retirement operations, the Bank of Canada apparently has not been compelled to acquire Government securities on a significant scale. A novel system to restrict the demands of the commercial banks for long-term bonds was introduced through an agreement between the banks and the Minister of Finance in March 1946. Under its terms, the commercial banks limited their holdings of Government obligations (other than very short-term issues) to a maximum of 90 percent of savings deposits. To supplement this limitation, it was stipulated that the maturity distribution of the long-term portfolio was to be such that income from it would not be more than the interest payable on the corresponding savings deposits, other expenses connected with these deposits, and a moderate profit.

It is difficult to assess the effectiveness of the scheme, because lending to the private sector revived and tended to reduce the proportion of assets invested in Government issues. To moderate credit expansion, the Bank of Canada then suggested to the commercial banks that it would be preferable for borrowers to obtain funds for capital expenditure by the sale of securities to the public, and that the banks should stop expanding their holdings of private long-term obligations. In compliance with this suggestion, which was made early in 1948, the banks slowed down their purchases. In 1949, with a reduction in the volume of capital investment in prospect, the suggestion was withdrawn.

The reliance on informal understandings and other forms of moral suasion as a method of credit control in Canada is in part the result of the concentration of banking—four banks hold three-quarters of the assets of the banking system—and in part a reflection of the general desire of the banking community to maintain, in the British banking tradition, a system with a minimum of statutory controls.

In addition to these special measures a change in the discount rate from 1½ to 2 percent has recently been decided upon. This is the first change since February 1944 when the rate was reduced by a full percentage point. In 1944, the bank expressed the view that it did not foresee any economic situation in the postwar period which would call for a policy of raising interest rates. The bank has now stated that current conditions of "pressure on the country's resources at a time of virtually full employment" have led it to withdraw its earlier view.

*India.*—By 1948, prices in India had risen to 4 times their prewar level. After the war, there was relatively little monetary expansion, occurring chiefly in 1948. Government expenditures, including outlays for economic development, were in excess of revenues in 1946-50, but the additions to the money supply and to bank reserves from this source were to a great extent absorbed by the deficit in the external balance of payments, which was particularly large in the first half of 1949.

By the end of the war, interest rates on high-grade loans or investments had been brought down to unusually low levels. A very gradual rise of long-term rates occurred in 1946-50. A major feature of monetary policy in this period was the financing of excess Government expenditures mainly from large cash balances which the Government had built up through wartime borrowing. The Government thus avoided heavy new borrowings which would have involved a choice between an active policy of credit expansion or a substantial rise in interest rates.

Continuing concern in India over the problem of maintaining monetary stability led to the passage of new banking legislation in 1949 which gave the reserve bank of India broad powers of qualitative and direct quantitative control over the lending operations of banks. These powers have not been exercised to date. The same legislation raised the requirement for reserves against demand liabilities, effective March 1951, from 5 to 20 percent. Reserve requirements had previously applied only to the larger (scheduled) banks, but will now apply to all banks in India. The banks were given 2 years in which to adjust their position to the new requirement. Further to ease the adjustment, banks will be permitted to satisfy

the new requirement with Government securities and other trustee investments as well as with cash or balances at the reserve bank.

## FRANCE

*The Bank of France and the state*

The nationalization of the Bank of France on January 1, 1946, completed a process begun 10 years earlier but already foreshadowed by Napoleon shortly after the creation of the bank in 1800, when he said, "I wish that the bank be sufficiently under the control of the Government, but not too much."

From 1806 the governor and two vice governors were appointed by the Government. Nevertheless a majority of the 15 members of the bank's council were for many years representatives of "high finance" who at times disagreed sharply with the fiscal and monetary policies of the Government. On more than one occasion the bank's refusal of credit to the treasury led to the Government's downfall. Public resentment at this power and at the consistently deflationary policies pursued by the bank during the early thirties was largely responsible for the reorganization of the Bank of France in 1936. By this reorganization the membership of the council was changed and henceforth it consisted almost entirely of public officials or of representatives of various economic interests appointed by the Minister of Finance.

The act of nationalization did little to change the relationship of the bank to the Government from what it had been since 1936. The governor and the 2 vice governors are appointed by the Prime Minister and 7 of the 12 counselors are appointed by the Minister of Finance; 1 of the counselors is elected by the bank employees and the other 4 hold office by virtue of their positions as heads of public credit institutions.

*The National Credit Council*

From the viewpoint of monetary policy, the creation of a National Credit Council was perhaps more important than the nationalization of the Bank of France. This council, which was established by the same law which nationalized the central bank and the four largest commercial banks, is charged with general advisory responsibility for credit control; furthermore, it is authorized to study and advise the Government on matters pertaining to its financial transactions and monetary policy.

The council is presided over by a Cabinet minister, 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, and business, agricultural, labor, and consumer groups.

The monthly meetings of the council provide a forum for discussion and resolution of issues in the field of monetary policy. Indeed, with its responsibility for formulating a consistent and general monetary policy, the council, whether its role is active or passive, provides an arena for the coordination of the views and objectives of the monetary and fiscal authorities. The council also furnishes one kind of answer to the need for some method of bringing together the many diverse agencies engaged in granting credit or in exercising control over some segment of the credit-granting process.

The large and varied membership of the council necessarily places much power in the hands of its secretariat, which is supplied by the Bank of France. In fact, it has been said that the council serves mainly to enhance the prestige of the Bank of France and is of great value to the bank in gaining acceptance for new measures of banking and monetary control which, in general, originate within the bank. On the other hand, the necessity of going through the council with its representation of all economic interests has certainly influenced the formulation of central bank policy.

*Monetary policy*

During the early postwar period, the National Credit Council attempted to reconcile the needs for rapid reconstruction with the avoidance of inflationary credit expansion by a policy of qualitative credit controls. Thus the banks were directed to scrutinize credit requests for urgency and lack of alternative sources of financing. In addition Bank of France approval was required for credits above 30 million francs (later 50 million francs, equivalent to around \$150,000).

These measures, however, proved generally inadequate to curb credit expansion, first because of the exemption of commercial bills from the supervision and second because of the intrinsic difficulties facing qualitative controls unaided by quantitative devices.

In the fall of 1948, with reconstruction largely accomplished, a comprehensive anti-inflation program was adopted cooperatively and simultaneously by both the monetary authorities represented by the council and the fiscal authorities. This program involved, on the fiscal side, increased taxes and ceilings on Government expenditures. On the monetary side, it involved the systematic application of quantitative credit controls.

In the first place, rediscount ceilings were established at the Bank of France for each commercial bank at a level slightly higher than that prevailing as of October 1. The effect of these ceilings was to limit access by the commercial banks to the central bank in order to obtain reserves with which to expand lending to the private economy. This measure was of considerable real and psychological importance because of the widespread use of the commercial bill and of its traditional reputation as a near-liquid asset.

In addition, a form of supplementary reserve requirement was established. Each bank was required to continue to hold the volume of Government securities it held on October 1, 1948, and to invest 20 percent of any increase in deposits in Government securities. It was decided to freeze the existing holdings of such securities rather than to apply a uniform percentage to deposits as the required holding because of the great differences among banks in asset structure. For any increases in deposits, however, a uniform fraction (20 percent) must be put into Government securities. In part this requirement merely formalized prior "gentlemen's agreements" between the Bank of France and the principal commercial banks whereby the latter undertook not to reduce their holdings of Government securities unless they suffered a net reduction in deposits. Thus, the commercial banks have been prevented from selling Government securities to increase private lending. In addition, of course, these measures prevented any financial embarrassment to the treasury which might have resulted from the failure of banks to renew their holdings of securities at maturity.

The end of 1948 marked the end of the French postwar inflation which had repeatedly and seriously threatened French political and social stability. Since the end of 1948, French price levels have been largely stabilized and there has been a remarkable improvement in the French balance-of-payments position. The measures of credit control which were adopted in October 1948 and were vigorously resisted in some quarters can no doubt claim a share in the credit for these developments. It should also be noted that credit policy since 1948 has shown a high degree of flexibility. Several restrictions have been eased when it appeared that changes in the general monetary situation made such action advisable.

#### BELGIUM

##### *Monetary policy*

Monetary policy has played a more important role in economic developments in postwar Belgium than in most other European countries. Any explanation for this fact must take into account two crucial decisions taken by the monetary authorities after the war. The first was the famous monetary reform carried out by Finance Minister Gutt upon liberation under which the excess liquid assets of the public were drastically reduced by a system of blocking of deposits and their partial transformation into long-term obligations of the state. As a result of this action, economic activity became strongly dependent on the availability of bank credit.

Given this dependence, the monetary authorities strengthened the credit-control functions of the central bank by instituting, early in 1946, a system of supplementary reserve requirements under which the commercial banks are required to maintain, in addition to cash reserves, a reserve of Government securities equal to 50 to 65 percent (depending on the size of the bank) of their deposit liabilities. This requirement limited severely the ability of the commercial banks to sell Government securities in order to increase private credit. This left rediscount of commercial paper at the National Bank of Belgium as the principal means by which the banks could expand credit, and, as a result, rendered the rediscount policy of the central bank an effective method of credit control. Thus supplementary reserve requirements have been a principal means of restraining excessive lending by the banks to the private sector of the economy.

##### *The National Bank of Belgium and the state*

The national bank was "seminationalized" in July 1948 when its capital stock was doubled and 50 percent was acquired by the state. In addition the powers of the private shareholders to choose the directors and regents were narrowly limited. Speaking broadly, this change in the status of the bank does not appear



to have greatly affected the position of the bank or the relationship of monetary to fiscal policy in Belgium. The bank, even when it was a private institution, was not completely independent of the Government. The governor has always been chosen by the Government, and a Government commissioner supervised the operations of the bank to insure that they were conducted in the public interest.

The extent to which the bank maintains its independent viewpoint is perhaps best illustrated by the open controversy, during the spring and summer of 1950, between the governor of the bank and the Minister of Finance concerning the use of the "profit" on the revaluation of the gold reserve. The bank argued that the state, to whom the "profit" would accrue, should use it to reduce its consolidated debt to the bank. The Government, on the other hand, wanted to utilize the sum to finance extraordinary public works expenditures. The significance of the bank's willingness to take a public stand against the Government is in no way weakened by the fact that the issue was finally decided in favor of the Government's view, since this decision was taken at a time of political and economic crisis when the treasury's receipts were temporarily reduced sharply.

In appraising the position of the Belgian National Bank with respect to the Government, one must take account of the strong and respected position of its governor, M. Frère. Moreover, despite the public controversy described above, it should be stressed that, on the whole, Belgian monetary policy in the postwar period has not only been fully approved by the Government, but fitted well into the Government's general economic policy which aimed at maintaining stability with a minimum of direct controls.

#### *The Banking Commission*

Matters of general monetary policy are decided directly between the national bank and the Government without specific machinery for coordination of policies. The Banking Commission, which in 1946 issued regulations concerning secondary reserve requirements, is primarily a technical regulatory rather than a policy-making agency. Its power to impose reserve requirements was originally intended essentially as a means of insuring liquidity of banks rather than as a credit control mechanism.

The commission was created by royal decree and the commissioners are appointed on the nomination of the Ministers of Justice, of Finance, and of Economic Affairs. It consists of a chairman and six members, two of whom are nominated from a list submitted by the central bank and two others from a list submitted by the commercial banks.

In general the commission works in close cooperation with the central bank; the latter supplies its secretariat and performs other services for it. An illustration of the coordination between the commission and the bank is provided by the commission's decision in October 1949 to ease slightly the secondary reserve requirements simultaneously with the bank's decision to lower the rediscount rate.

### THE NETHERLANDS

The nationalization of the Netherlands Bank in 1948 appears so far to have had little effect on its functions or on the independence of monetary policy in the Netherlands. As will be shown below, traditional monetary policy has played a very small role in the Dutch economy during the whole postwar period and, in fact, began only quite recently to assume a more prominent place among economic policies in the Netherlands.

#### *The Netherlands Bank and the state*

Perhaps the most significant change brought about by the banking legislation of 1948 was a provision that the Minister of Finance is empowered to give directions, whenever necessary, to the governing board of the bank in order to coordinate the Government's monetary and financial policies and those of the bank. On the other hand, the governing board is entitled to appeal to the Crown in case of disagreement with these directions. Such an appeal would lead to further careful consideration of the issue by the Government. In addition, the members of the governing board are now appointed by the Crown rather than elected by the shareholders; however, the president of the bank was so appointed even before nationalization. In the words of the bank in its report for the year 1948: "Only practice will prove how the relation between the bank and Government may develop under the new status. We feel it is a task of great responsibility to cooperate in forming a tradition which, next to the legal provisions, will in the long run be decisive in determining this relationship."

*Postwar policies*

Traditional monetary and credit controls have, until very recently, played practically no part in the postwar policies of the Government. Immediately after the war a thorough currency reform, similar to that of Belgium, was undertaken in the Netherlands. While its immediate effect was to decrease drastically the liquidity of consumers and producers in the Netherlands, subsequent policies led again to relatively large cash holdings by the public, especially business firms. This situation compelled the extensive use of price controls, rationing, and subsidies to repress the inflationary tendencies arising from the high level of investment.

During the postwar period the only measure of credit control was a qualitative one: All bank credits exceeding 50,000 guilders required the approval of the central bank. It is difficult to appraise the effects of this measure. Except for a sizable increase in 1946, private credit has expanded relatively slowly. But it is, quite possible that direct controls on various types of investment expenditure may have weeded out most of the potential requests for bank credit. Furthermore, many business firms were enabled by their liquidity to expand production without recourse to bank credit.

As recovery proceeded, the Government undertook to eliminate direct controls on consumers, to reduce subsidies, and to liberalize import restrictions. By September 1949 when the currency was devalued by 30 percent, most price and rationing controls had been eliminated.

*Recent changes in monetary policy*

With the outbreak of hostilities in Korea and the rising world price level, Dutch prices began to rise again. In order to combat inflationary pressures and to discourage speculative accumulation of inventories the Dutch authorities now turned to traditional monetary policies. The Netherlands Bank raised its rediscount rate from 2½ to 3 percent, this being the first change in the rate since 1941. At the same time it was announced that, for the first time in Dutch history, a system of cash reserve requirements would be instituted for the commercial banks.

The reserve requirements will compel each bank to maintain the same ratio of cash reserves to deposit liabilities as existed in some base period. Because of the wide differences in customary reserve ratios among the banks, it was apparently decided to "freeze in" existing reserve ratios rather than to impose uniform percentage requirements for all banks, or all banks in a given size class.

The Netherlands thus provides an especially direct example of the adaptation of monetary policy to a changing economic pattern. In the earlier postwar period, while an extremely high rate of investment was being encouraged, open inflation was prevented by rationing and other direct controls; relatively little use was made of monetary and credit controls. Subsequently, however, with the resurgence of inflationary pressures in 1950 after the direct controls had largely been abolished, the authorities have decided to attack this situation by traditional monetary means, and are therefore adopting monetary measures more vigorous than any that were used in the 1946-49 period.

## SWEDEN

*Postwar monetary policy*

Differences of opinion as to the appropriate monetary policy led in December 1948 to the resignation of Ivar Rooth who had been Governor of Sweden's central bank (the Riksbank) for 19 years. Mr. Rooth resigned in protest against the Government's policy of pegging the long-term interest rate at 3 percent, a policy that led between 1946 and 1948 to large bond purchases by the central bank. At a time of general inflationary developments, Mr. Rooth favored greater flexibility in interest rates and, in general, greater reliance on monetary policy in combating inflation.

Mr. Rooth's views were opposed not only by the Cabinet, but also by a majority of the Riksbank's directors, who are elected by the Swedish Parliament for 3-year terms. The Swedish Government's position was that a stable interest rate was essential to the general policy of stabilizing prices and wages through a series of direct controls and subsidies. As an alternative to limiting Riksbank purchases of Government securities and to permitting a rise in the rate of interest, it was felt that excessive investment should be checked by physical controls such as building permits. Higher interest rates were thought to be undesirable because they would eventually lead to higher rents and thereby to demands for higher wages. Mr. Rooth believed, on the contrary, that the creation of new bank reserves necessitated by the Government's policy led in itself to inflationary pressures which direct controls would be more and more unable to check.

Mr. Rooth's resignation, after a long period of smoldering conflict, came at a time when the first postwar inflationary process had largely run its course. In early 1949 investment pressures relaxed, and the banks found it no longer necessary to continue their sales of Government securities to the Riksbank.

#### *Recent changes in monetary policy*

Renewed inflationary pressures made themselves felt in the Swedish economy early in 1950, and were then intensified by the repercussions of the Korean conflict. In this situation the Riksbank, in full agreement with the Government, has acted quickly to utilize the previously neglected instruments of monetary policy for anti-inflationary purposes. The bank in July 1950 withdrew its support from the bond market for the first time since the war, permitting bond prices to fall slightly below par. It also obtained Government approval for the imposition of an entirely new set of reserve requirements which combine the cash and the supplementary reserve principle in the following way:

(a) Cash and supplementary reserve assets (primarily Government securities) are set for the five big banks at 10 percent of total liabilities exclusive of savings deposits and contingent liabilities. Lower percentages apply to the smaller banks.

(b) Forty percent of these reserves must be held in cash (till money and sight deposits with the Riksbank) and 25 out of this 40 percent must be held on deposit with the Riksbank.

These reserve requirements which were applied as of October 1, 1950, will not require any considerable reshuffling of assets on the part of the banks, but they will tie down assets that might otherwise have been used for further credit expansion. Moreover, the authorities hold the power to increase reserve requirements up to 25 percent of liabilities and to vary the proportion of these reserves to be held in cash.

Finally, the Riksbank has conducted active negotiations with the various credit institutions with the aim of inducing a more cautious attitude to lending in general and of discouraging in particular credits for nonessential production, for speculative purposes, or for consumption.

### GERMANY

#### *The Bank deutscher Laender and the Government*

Under the military law establishing the postwar German central banking system, the government of each land (state) appoints the president of its Land Central Bank; the presidents of the 11 banks are the members of the board of directors of the Bank deutscher Laender—which coordinates central banking for the whole territory of the Federal Republic of Germany—and appoint the management of that bank. The Federal Government has no legal connection with the bank whatsoever. The occupation authorities supervise the Bank through the Allied Bank Commission; however, since the promulgation of the Occupation Statute of 1949 the powers of the Allied authorities have been virtually restricted to matters directly or indirectly pertaining to Germany's international economic relations.

#### *Proposed central banking act*

Under the proposed German central banking act, the Federal Government will appoint two delegates to attend the meetings of the board of directors in an advisory capacity and these delegates will have the right to protest decisions of the board which they consider illegal or against the best interests of the country. As to the effect of such a protest, there is some difference between the drafts submitted to the German legislature by the German Cabinet and by the bank management. According to the Cabinet draft, a conflict between the directors and the delegates would be decided by a Federal committee, the composition of which would make it likely that the Cabinet point of view would as a rule be sustained; according to the bank draft, a veto would merely force the board of directors, enlarged by a number of Government-appointed experts, to reconsider the question at its next meeting.

In practice, there has been steady and intimate consultation between the bank management and the Federal Government on all questions of bank policy, and this situation is not likely to be substantially affected by the proposed changes.

#### *Monetary policy and debt management*

In contrast to the experience of many other countries, German postwar monetary policy has not been concerned with the problem of managing a large public debt. The domestic debt of the former Reich Government has, for practical purposes, been wiped out by the currency reform of 1948; the debt of the new

Federal and land governments consists almost exclusively of practically non-marketable "equalization claims" allocated to the central banking system and to private credit institutions under the currency-reform legislation and of a much smaller amount of short-term advances, mainly by the central banking system.

The central banking system may purchase or discount equalization claims held by private credit institutions insofar as necessary to assure the liquidity of these institutions. The land central banks may also grant credits to their respective land governments for the purpose of covering temporary cash deficits, up to one-fifth of their total deposits; and the Bank deutscher Laender may grant short-term advances to the Federal Government within a statutory limit.

Monetary policy has relied mainly on changes in the discount rate and in cash reserve requirements. In addition, the central banking system has issued directives to the private credit institutions setting limits for the aggregate amount of bank lending as well as for special types of credit. In spite of the absence of Government bonds from the market, the central banking system has also conducted some open-market operations affecting mainly municipal and mortgage bonds. The purpose of these operations is to maintain the price of these bonds so as to prevent their yield from rising substantially above 5 percent. In this way the central bank hopes to lay the foundation for a revival of a capital market and, in particular, for the flotation of bond issues by the Federal Government.

#### ITALY

##### *The Interministerial Committee and the Bank of Italy*

The formulation of Italian monetary and banking policy was the object of detailed legislation adopted during the Fascist period (1936). An interministerial committee presided over by Mussolini was to determine credit policy and a specially constituted "supervisory agency (Ispettorato) for the defense of savings and for the exercise of credit" was to carry it out. The Bank of Italy provided the technical organization for both the committee and the "Ispettorato" and carried out their functions through its regional branches. Nevertheless, the system was criticized because of some duplications to which it gave rise, especially because of the newly created Ispettorato. In 1944, a decree of Italy's new provisional government abolished the Ispettorato and the interministerial committee and transferred the policy-making functions to the Minister of the Treasury and the executive functions to the Bank of Italy. The very simplicity of this arrangement recommended it in a period of complete economic disruption. It was replaced in 1947 by a new decree which is currently in force.

This decree reestablished an Interministerial Committee for Credit and Savings composed of the Minister of the Treasury as chairman, and of the Ministers of Finance, of Agriculture, of Industry, and of Foreign Trade. The Governor of the Bank of Italy, although not a formal member, attends the sessions of the committee, and perhaps more important, the bank is entrusted with carrying out the decisions of the committee as well as with the analysis of the problems which are within the committee's competence. This covers not only broad problems of monetary policy but also a great number of purely banking matters such as the chartering of new banks or branches, the fixing of charges for banking services, the publication of periodic statements by banks, etc.

The influence of the Bank of Italy on the actions of the Interministerial Committee appears to be substantial. Thus, to give but one example, the first session of the newly created committee in August 1947 decided upon the now famous Einaudi credit restrictions which were to break the backbone of the Italian inflation; but the Bank of Italy, in its annual report for 1946 issued in March 1947, had discussed and advocated measures very similar to the ones that were adopted by the committee.

The bank's influence is in fact much greater than could be deduced from a mere knowledge of the institutional framework. This arises in part from the exceptional qualities of its two postwar governors, Einaudi and Menichella, and in part from the high caliber of its operational and research staff. The fact that Einaudi was appointed as Minister of the Treasury at the moment of greatest danger for the lira in 1947, was of course in large measure responsible for the adoption by the Interministerial Committee of credit policies which had long been advocated by the Bank of Italy. The success of Einaudi's credit policies in saving the lira contributed powerfully to his elevation to the Presidency of the Italian Republic in 1948.

*Monetary policy*

Italy provided an outstanding postwar example of the effective use of monetary-banking policy in the fight against inflation. In the summer of 1947 inflation seemed triumphant; prices had risen to 60 times their prewar level and had doubled within a year. Then in October, prices suddenly started falling and leveled off in March 1948 at 15 to 20 percent below their peak levels. Although a number of other factors favored this drastic reversal, it is commonly agreed that the major credit for having saved the Italian currency from ruin is due to the measures which were decided upon by the Interministerial Credit Committee in August 1947 and which became effective in October.

These measures required all banks to set aside an amount equal to 20 percent of their deposits in excess of 10 times their capital or an amount equal to 15 percent of their total deposits; whichever was smaller. These amounts were either to be invested in government or government-guaranteed securities for deposit at the Bank of Italy, or to be 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 was to be set aside in a similar fashion until the bank's total reserves reached 25 percent of its total deposits. At the same time the discount rate of the Bank of Italy was raised from 4 to 5½ percent.

These new reserve requirements had been advocated by the Bank of Italy on the ground that it needed "a more efficient instrument of maneuver than that provided by the mere variation of the official discount rate which today has lost almost all of its influence on the market."<sup>3</sup> The new regulations did not necessitate any massive calling in of loans; nevertheless, the change in atmosphere was complete. Whereas previously the banks had not hesitated to draw on funds held in interest-bearing accounts with the Bank of Italy or the Treasury so as to expand their loans, they now became reluctant to increase lending since additional lending would have involved borrowing from the Bank of Italy.

Since a good deal of economic activity, particularly in reconstruction and investment, was premised on further credit expansion, a general shortage of funds was felt in the months following the adoption of the credit restrictions. After so violent an inflation as had been experienced in Italy, it was impossible to stop the inflation without incurring some deflationary developments. From the middle of 1948 on, however, Italian monetary policy has been attacked from various quarters on the ground that a more active policy of encouraging investment would be desirable and would not be incompatible with monetary stability.

## LATIN-AMERICAN COUNTRIES

In Latin-American countries, the central bank has been virtually the only source of domestic finance for government deficits since the public and the commercial banks have not generally held any sizable portion of their assets in the form of government securities. The interest rate charged the government is usually negotiated directly by the treasury and central bank, with little reference to the supply-and-demand forces and terms existing in the private credit market. The treasury therefore has more concern over direct access to central bank credit than over general credit conditions. On the other hand, the existence of government deficits requiring financing by the central bank has often been a source of concern to the latter.

Given increasing governmental responsibilities for developmental investments and for the extension of social services, coupled with problems in raising taxes, it is often difficult to accommodate the government's need for credit without endangering the country's economic stability. In the last analysis, the central bank cannot deny any insistent request for credit by the treasury if the treasury has the support of the highest executive authority. The central bank can attempt to impress upon the treasury, as well as upon high authorities and even the public, the monetary implications of proposed fiscal policies. After a decision is taken, all that it can do is to minimize any undesirable repercussions of the treasury's operations by regulating the availability and cost of credit to the private sectors of the economy.

*Central banks and the state*

The central bank's place in the government's organizational structure, and its relationship with the treasury, vary widely from one Latin American country to

<sup>3</sup> Banca d'Italia, *Adunanza Generale Ordinaria* (Annual Report for 1946), Rome 1947, p. 169.

another. A summary classification might separate those countries which have made formal statutory provision for the coordination of treasury and central bank policies from those which have not done so. In those countries where such provision has been made, legislative regulations provide (1) that the central bank has the power to make final decisions affecting monetary policy, (2) that the treasury hold this power, or (3) that a third agency resolve any conflict that may arise between the two agencies.

Recent legislation in a few countries (e. g., Dominican Republic, Guatemala, Honduras) explicitly grants to the central banks responsibility to make final decisions in the field of monetary policy. Whether the central banks would, in fact, exercise such responsibility in the face of conflict with the treasury in these countries has not been tested as yet. The legislative grant of authority goes even further in Costa Rica, where other government institutions are obliged to cooperate with the central bank officials in making the central bank's policies effective. On the other hand, legislation in Bolivia, Colombia, and Mexico requires that certain specified central bank monetary policies and actions be submitted to the minister of finance for his approval or prior review. In eight Latin American countries, the minister of finance is a member of the board of directors of the central bank. In general, the prestige of the position of the minister of finance may give him an influence on monetary decisions far beyond the formal powers of approval or veto with which he may be endowed.

A few countries have statutory limitations on central bank operations, particularly on the bank's ability to extend credit to the government. These limitations have taken the form of absolute ceilings upon government borrowing from the central bank (Peru), of ratios between central bank holdings of government securities and average fiscal revenues of the government over a number of preceding years (Cuba, Paraguay), or of ratios between the central bank's credit to the government and the bank's capital and reserves (Chile, Colombia). When further credit to the treasury would result in exceeding certain established limitations, the potential conflict between the treasury and the central bank is sometimes resolved either by the cabinet (Paraguay) or by the legislature (Chile, Colombia). In effect, the responsibility for reconciling a treasury-central bank conflict is shifted to a higher governmental authority.

#### *Monetary policies*

Given the dependence of the government on central bank credit, the control of private credit expansion is made difficult. Government borrowing from the central bank leads to an increase in the free reserves of the commercial banks and, under the system of fractional reserve requirements existing in Latin America, makes possible a multiple expansion of bank credit. Because of the absence of active security markets, open-market operations by central banks are generally not feasible.

Various special measures have therefore been devised by Latin American central banks to restrict the over-all volume of bank credit expansion. In a few instances, selective controls have been applied to obtain some channeling of credit into officially desired fields.

*Mexico.*—Mexico serves as the best example in Latin America of a country which has employed both traditional and novel techniques of quantitative and selective credit controls. With respect to reserve requirements, banks in Mexico are divided into three classes, the classification being somewhat analogous to that in the United States. Required reserves in Mexico City banks against peso demand liabilities were raised from 7 percent in the prewar years to 50 percent in 1944 and later years.

During the war years, there had been an intermittent "gentlemen's agreement" by the larger commercial banks with the Bank of Mexico to maintain portfolio ceilings. This informal arrangement was dropped in December 1946. Thereafter, a shift was made to force formal controls and increasing emphasis was placed upon influencing the composition of commercial banks' credit portfolios. In September 1948 the Bank of Mexico abandoned its uniform rediscount rate of 4½ percent and established multiple rediscount rates. These rates range from a low of 3½ percent for credit documents representing loans to increase agricultural production to a high of 8 percent for so-called commercial or nonproductive loan paper. At the same time, the Bank of Mexico adopted a severely selective rediscount policy; outside of hardship cases rediscount privileges are restricted to private commercial banks which maintain at least 60 percent of their credit portfolio in productive loans.

The regulation of commercial bank credit portfolios became much more formal in September 1949 when a new and elaborate system of reserve requirements was established. Banks are now required to hold an additional reserve of 100 percent against peso demand liabilities in excess of the level existing on September 30, 1949; the basic 50 percent reserve applies only to the peso demand liabilities up to this level.

Both the basic and the additional requirements may be satisfied in part by holdings of Government or Government-guaranteed securities. In addition, as much as one-half of the additional 100 percent reserve may be in the form of private paper described under six categories which set forth the various types, terms, purposes, and amounts of loans which may serve as reserves.

Although no comprehensive appraisal of the effectiveness of these various techniques is yet available, the Mexican authorities are reported to have confidence in the new structure of credit controls.

#### FAR EASTERN COUNTRIES

In most of the countries of the Far East, commercial banks hold relatively little government debt. In those countries, therefore, as in most Latin-American countries, the treasury has relatively little direct concern over the general structure of interest rates or availability of commercial bank credit. The most important exception has been Japan, where there is a substantial market for Government securities among the commercial banks and other financial institutions.

##### *Japan*

The Bank of Japan and the Japanese Ministry of Finance have a long history of close collaboration, in which the Bank of Japan has had the responsibility for the underwriting and distribution of Government debt. Decisions of credit policy during the prewar and war periods were made in the light of the Government's financial requirements and with a view to minimizing their inflationary impact.

Under conditions of occupation it is more difficult than usual to judge the relative weight of the two institutions in policy making. It was not until 1949 that inflation was halted in Japan by bringing Government revenues in line with expenditures. It is not clear to what extent the Bank of Japan effectively restrained the expansion of private credit which occurred while the inflation was continuing nor to what extent its policies have shifted since the rise in prices and monetary circulation was halted.

New legislation in 1949 set up a policy board of the Bank of Japan, including as voting members the governor of the Bank and four members appointed by the cabinet with approval of the legislature. Representatives of the Ministry of Finance and of the economic stabilization board sit on the policy board without voting powers. It is generally considered in Japan that the governor continues to provide active leadership in formulating Bank of Japan policy, although the Minister of Finance still has legal power to "order the Bank to undertake any necessary business."

##### *Philippines*

In the Philippines where the central bank came into existence at the beginning of 1949, most of the commercial banks hold relatively little Government paper. Moreover, the power of the central bank to make direct budgetary advances to the treasury is rigidly circumscribed, but the central bank has been called on to extend credit to the Philippine National Bank, a Government-owned commercial bank, which has become heavily involved in financing the treasury. Thus, as a result of the Government's failure to maintain a balance of revenues and expenditures, difficulties have been created for the achievement of the central bank's objectives.

The Philippine Monetary Board, the directing board of the central bank, includes the Secretary of Finance, the governor of the bank, the president of the Philippine National Bank, the chairman of the governing board of the rehabilitation finance corporation, and three appointed members. This arrangement was intended to be of assistance in obtaining coordination of policy among the various agencies and institutions.

The powers of the central bank include the power to change the reserve requirements within specified limits and "to permit the maintenance of part of the required reserves in the form of assets other than peso deposits with the central bank." At present the commercial banks are permitted to hold Government

securities as reserves up to 5 percent of their demand deposits, the total requirement being 18 percent, unchanged from before the establishment of the central bank. The central bank also has authority to fix limits on the expansion of total loans and investments of each commercial bank or of loans and investments of particular classes. This authority has not been used.

*Indonesia*

The Bank of Java, which also does a large commercial-banking business, functions as the central bank of Indonesia. During 1949 it pursued a policy of contracting private credit to offset, in part, the inflationary consequences of its large advances to the Government. To insure that the bank of issue will continue to have a degree of independence, the economic agreement between Indonesia and the Netherlands of November 2, 1949, provided that Indonesia will consult the Netherlands regarding proposed changes in the monetary laws, the appointment or discharge of directors, and credits to be provided to the Government by the bank of issue.

