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Chapter Author: Anna Youngman

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LEGACIES OF WAR FINANCE

CURRENCY IN CIRCULATION

Currency in circulation increased approximately \$3.56 billion in the two-year period 1940-41. During the subsequent two and a half years to June 30, 1944, the increase amounted to \$11.3 billion. At that date the great proportion of this currency consisted of Federal Reserve notes of which almost \$18.9 billion were outstanding. These notes amounted to more than 50 percent of total Reserve Bank liabilities, and exceeded member bank reserves by over \$6 billion.

In the main the increase of currency in circulation can be accounted for by the rise in wage payments and in living costs, especially in food and clothing.⁴⁹ Additional requirements for currency expansion have resulted from shifts in population accompanied by the severance of banking connections and from changes in the character of retail buying. Accumulations of currency abroad arising from expenditures of soldiers have also been a factor. Currency in circulation since 1942 has grown more rapidly even than wage payments, which comprise about 70 percent of national income payments. This difference is partly attributable to factors such as the growth of activities conducted on a cash basis for purposes of concealment and tax evasion. Also, it reflects a greater use of cash as a medium of saving, particularly by individuals in the lower and middle income groups, who do not maintain checking or savings accounts with banks.⁵⁰

At the time of our entry into the war Federal Reserve gold holdings were so large that they imposed no restraint on currency expansion. Owing chiefly to the extraordinarily rapid and continuous expansion of currency in circulation, combined reserve ratios against Federal Reserve Bank deposits and note liabilities had declined by the end of June 1944 to 56 percent from 74 percent at the end of June 1943, and 86 percent at the end of June 1939. This rapid rate of decline in reserve ratios would, if continued many more

⁴⁹ C. R. Whittlesey, *The Effect of War on Currency and Deposits* (National Bureau of Economic Research, Financial Research Program, Occasional Paper 11, 1943) pp. 24-28.

⁵⁰ See the *National City Bank Letter* (February 1944) p. 23, and G. L. Bach, "Currency in Circulation," *Federal Reserve Bulletin* (April 1944) pp. 318-28.

months, necessitate resort to one or more of the expedients outlined earlier to satisfy currency demands.⁵¹

Whatever form the increase of currency in circulation may take under present conditions it will be based largely on government debt, without regard to the amount of gold held by the government or formally pledged as security against irredeemable Federal Reserve note issues. Consequently United States notes (so-called greenbacks) or other Treasury issues that might be substituted for Federal Reserve notes are not uniquely inflationary forms of currency merely because they represent monetization of the public debt.

The question at issue is not whether to meet the demand for more currency but how to meet it, when or if the Federal Reserve Banks' reserves against notes approach the statutory minimum. That would involve decisions of policy by the Federal Reserve and Treasury officials that should be influenced to some extent by the reaction to be expected from the public. Employment of the emergency devices authorized by the Thomas amendment would possibly meet with an unfavorable reception, in part because issuance by the government of unsecured paper money, like direct borrowing from central banks, is associated with loose fiscal practices.

Suspension or reduction of statutory reserve requirements against Federal Reserve notes would be the most direct method of meeting the increased currency demand, if that demand should continue until emergency action has to be taken. It not only would obviate resort to devices for increasing the currency supply that have fallen into disrepute, but it would concentrate responsibility for meeting currency demands in the hands of the Federal Reserve authorities.

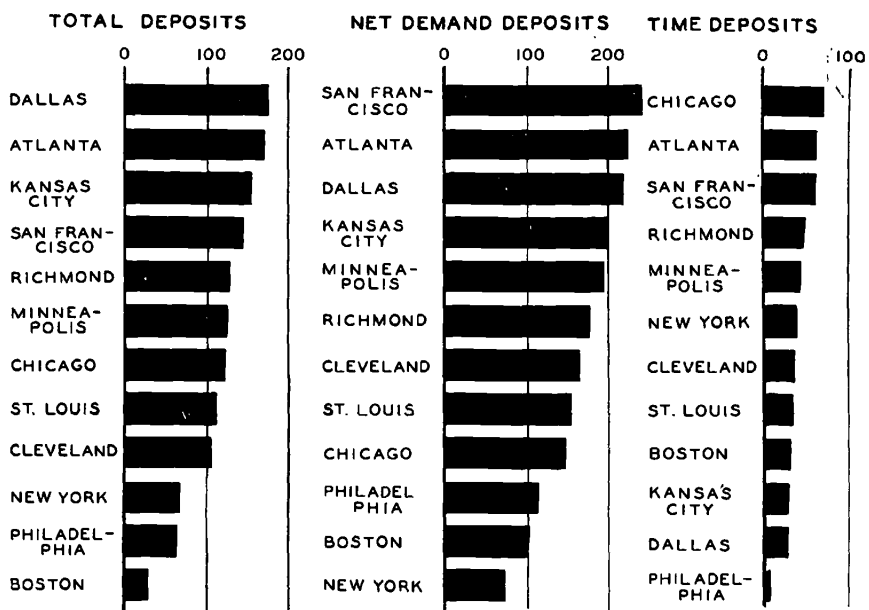
The wartime growth in the use of currency has been interpreted to reflect a long-run shift in the money-using habits of the country, with currency becoming more and more the money of individuals, and demand deposits the money of business.⁵² Even if such a shift is actually occurring, a return to normal living conditions after hostilities may bring some reduction in the volume of currency in circulation. Lowered employment and payroll declines in the post-war period would reduce cash holdings of wage earners. Hoarded cash might also be spent to satisfy pent-up demands for durable consumer goods.

⁵¹ See above, p. 3.

⁵² Bach, *op cit.*, p. 328.

An inflow of currency into the banks as a result of such developments would increase the volume of bank reserves equally with bank deposits, and thus add to the volume of excess reserves. If such an inflow were to occur at a time when the Federal Reserve authorities were trying to curb an undesired inflationary expansion of credit their task would be rendered all the more difficult. To the extent that member banks had previously borrowed from the Federal Reserve Banks, the return of currency might be offset to some degree by repayment of such indebtedness. But in view of the limited volume of member bank borrowing to date, such offsets are not likely to be important. On the other hand the return of currency to the banks, coinciding with a drop in employment, might be welcomed as a stimulus to credit expansion.

CHART 3 — PERCENTAGE CHANGES IN MEMBER BANK DEPOSITS BY FEDERAL RESERVE DISTRICTS, JUNE 30, 1939—JUNE 30, 1944^a



Source: *Federal Reserve Bulletins*.

^a The relative importance of net demand and time deposits varies among Federal Reserve Districts. Therefore, the ranking of Districts by percentage increases of total deposits differs from ranking by percentage increases of net demand deposits and of time deposits.

DEPOSIT LEGACY

The wartime expansion in member bank deposits by Federal Reserve districts, June 30, 1939—June 30, 1944, is shown in Chart 3. Even greater diversity of deposit increase than that among the districts has occurred among reserve cities; for example, deposits of member banks in Portland, Oregon were up 324 percent and those of Pueblo, Colorado only 5 percent. For the commercial banking system as a whole, increases in deposits have been balanced by increases in holdings of government securities. The location of deposits, however, is subject to continuous shift, depending upon the income-spending patterns of depositors whom the banks serve.

Under our unit banking system, banks meet deposit transfers by drawing on their reserve funds. If these funds are not adequate, it is necessary to convert earning assets into reserves. But, a transfer of deposits between banks does not necessarily result in the transfer of the specific earning assets held against them, since the asset preference of banks gaining deposits may differ from that of banks losing deposits. Thus values in two different credit markets may be affected by deposit transfers. If banks losing funds liquidate earning assets to offset the drain, and banks gaining funds prefer to hold such funds in the form of excess reserves, then a net addition to the reserves of the banking system is needed to avoid disturbing the deposit and asset position of other banks.

The Federal Reserve Banks as the ultimate source of additional reserve funds in wartime are closely concerned with both intra- and inter-district (net) flows of funds; their concern is enhanced by the war and the responsibility Federal Reserve officials have assumed for the orderliness and stability of the government bond market. The type of problem to which inter-district flows of funds give rise may be illustrated by the developments in the New York District during 1942-43, referred to earlier. The funds obtained by the Treasury from the sale of government securities to the New York banks and from tax collections in the New York District were largely disbursed for war production in other districts. To meet the resulting deposit drains, New York banks found it necessary to employ their excess reserves and to sell securities. The Federal Reserve Banks constituted the primary demand for these security offerings. They either added to the total supply of reserve funds through open market purchases or served as intermediaries through

which these securities were transferred to outlying banks gaining deposits. Similar adjustments will undoubtedly be required of the System during and after the war. They may present especially serious problems after the war when a considerable and abrupt reduction and relocation of productive activities may well be accompanied by heavy intra- and inter-district shifts in deposits.⁵³

The four surveys of deposit ownership conducted by the Board of Governors bear upon these problems.⁵⁴ At the end of July 1944 deposits of incorporated and unincorporated businesses were estimated at \$37.4 billion or nearly 63 percent of the estimated \$59.6 billion of demand deposits belonging to individuals, partnerships and corporations, while deposits belonging to individuals estimated at \$18.6 billion comprised 31 percent of the total. The remaining 6 percent belonged to nonprofit organizations, trust funds of banks and foreigners. For the entire period covered by the surveys (December 31, 1941-July 31, 1944) the estimated total increase in deposits amounted to \$22 billion. More than half that increase was added to business deposits which rose 50 percent. About two-fifths of the total increase was accounted for by the rise in individual deposits which showed a growth of 86 percent. These surveys throw light upon the possible volatility of existing deposits and the character of the control problems resulting from deposit growth.

At the middle of 1944 total adjusted deposits of all member and nonmember banks amounted to \$115 billion and demand deposits of individuals, business and government to \$80 billion. These figures indicate increases of \$60 and \$52 billion respectively since mid-1939 and suggest the dimensions of the credit control questions that will confront the Federal Reserve authorities in the postwar period.

The increase in the volume of bank deposits and currency from the beginning of 1942 to June 1944 accompanied an expansion of the outstanding federal debt, direct and guaranteed, of about \$137 billion. Somewhat more than half of this increase in debt was acquired by private investors and government agencies, and the remainder by the commercial banks and the Federal Reserve Banks. By adding newly acquired nonbank security holdings to the increase

⁵³ See Board of Governors of the Federal Reserve System, *Annual Report, 1943*, p. 29.

⁵⁴ *Federal Reserve Bulletins* (August 1943) p. 713, (October 1943) p. 918, (May 1944) p. 432 and (November 1944) pp. 1069-76.

in deposits and currency, the total increase in liquid assets of business concerns and individuals for the two and a half year period is shown to approximate \$110 billion. From the preceding data it is evident that at the conclusion of the war the public will hold an immense volume of liquid resources in the form of demand deposits and currency, savings deposits, savings bonds redeemable in cash on demand and other readily salable government obligations.⁵⁵

The effect on problems of postwar credit control of savings bond redemptions, of liquidation of government securities holdings by nonfinancial corporations, and of repayment of maturing debt will depend not only upon their volume but upon the methods employed by the Treasury to finance these demands, and upon the then current state of business. If the Treasury should borrow from the commercial banks to obtain funds for paying off savings bond holders and meeting maturities when business is expanding and prices are rising, a most unwelcome accentuation of inflationary pressure might result. If redemptions and maturities were financed by bank borrowing when business was declining and deflationary pressures were in evidence, such financing might be looked upon as a compensating influence.

PUBLIC DEBT IN THE BANKS

The preceding discussion has emphasized the tremendous volume of public debt lodged in the commercial banks and the Federal Reserve Banks by war financing. At the end of June 1944 member bank holdings of government securities amounted to 72 percent of their total loans and investments as compared with only 42 percent in June 1939. Government securities were nine times bank capital accounts in June 1944 as compared with two and a half times capital

⁵⁵ *Federal Reserve Bulletin* (April 1944) p. 330. In a statement before the Senate Banking and Currency Committee, March 24, 1944 on S. 1764 to amend the Emergency Price Control Act of 1942, Marriner S. Eccles, Chairman of the Board of Governors, said: "The inflationary potential which it is estimated will exist at the end of this fiscal year, on June 30, 1944, measured by demand deposits and currency, savings deposits in the banks and Government securities held by business concerns and individually, but excluding Government securities held by life insurance companies and banks, will amount to 194 billion dollars; 113 billions held by individuals and 81 billions by business. This compares with liquid holdings as of June 30, 1941, of 48 billions held by individuals and 31 billions held by business, a total of 79 billions. In other words, there will have been an increase in the three-year period of 115 billion dollars."

accounts in June 1939. Except for a small volume of industrial assets, and discounts and advances, all the earning assets of the Federal Reserve Banks at the close of the fiscal year 1944 consisted of government securities. These figures reflect drastic changes from 1939.

As stated earlier the Treasury has endeavored to confine commercial bank purchases of government securities during the war emergency largely to maturities not exceeding ten years, and in general this aim has been attained. The proportion of bank portfolios maturing in less than one year increased from 4 to 31 percent from mid-1939 to mid-1944, and the share maturing in less than 5 years from 36 to 57 percent. These changes, shown in Table 2 for each major group of banks, have been encouraged by Federal Reserve Bank policies designed to broaden the market for short-term issues and to stabilize the pattern of interest rates. Open market purchases of the Federal Reserve Banks have been concentrated in this section of the market, and Reserve Banks have stood ready to take over com-

TABLE 2 — DISTRIBUTION OF GOVERNMENT SECURITY PORTFOLIOS OF FEDERAL RESERVE BANKS AND MEMBER BANKS, BY MATURITY, JUNE 1939 AND 1944 (dollar figures in billions)

<i>Bank Groups</i>	<i>Maturity Class</i>					<i>Total</i>
	<i>Under 1 Yr.</i>	<i>1-5 Years</i>	<i>5-10 Years</i>	<i>10-20 Years</i>	<i>Over 20 Years</i>	
Federal Reserve Banks			~~~~~			
1939	34%	33%		33%		\$2.6
1944	86	7		7		15.1
All member banks						
1939	4	32	26%	26	12%	10.9
1944	31	26	31	9	3	59.5
Central reserve city banks						
1939	8	34	22	24	12	4.4
1944	35	28	28	8	1	19.6
Reserve city banks						
1939	2	31	30	27	10	4.1
1944	34	26	29	9	2	22.1
Country banks						
1939	1	28	27	30	14	2.4
1944	24	27	35	10	4	17.8

Sources: *Member Bank Call Reports* and *Federal Reserve Bulletins*.

mercial bank offerings of Treasury bills in unlimited amounts at fixed or relatively fixed prices.⁵⁶

However, bank holdings of the longer maturity classes have expanded as well. Holdings by member banks of maturities in excess of 5 years amounted to \$25 billion or 3.7 times capital at the end of June 1944 as opposed to \$7 billion or 1.3 times capital accounts in 1939. This expansion in the bank market for intermediate and longer-term issues has heightened the interest of commercial banks and the Federal Reserve authorities in the stability of the market values of these securities.

Referring to the possible effects of postwar inflation on the structure of interest rates and the market values of government securities in general, the Board of Governors asserted that "in view of the enormous growth of our public debt, it will be vitally important to keep direct controls in effect after the war is ended, and thus to hold the line on economic stability."⁵⁷

With commercial bank deposits and currency based preponderantly upon government debt and expanding with the increase in that debt, the supply of money is evidently no longer adjustable to any significant extent to changes in the volume of business transactions. Deposits and currency are not deflatable, under such circumstances, except by the retirement of bank-held federal debt or by transfers of government obligations from commercial banks to nonbank investors. Currency in circulation may return to the banks but the resultant reduction in this form of cash holdings would be offset by an increase in deposits. Contrariwise deposits may contract with an outflow of cash from commercial banks; that, however, would only change the form and not reduce the volume of money in the possession of the public. The inelasticity of currency and deposit holdings built up during the war period re-enforces the

⁵⁶ Board of Governors of the Federal Reserve System, *Annual Report, 1943*, p. 18: "The buying rate on bills established by the Reserve System, combined with the option to repurchase at the same rate, works in the direction of giving banks greater flexibility in the management of their reserve funds. Also, the maintenance of the broad level of prices of other Government securities provides a high degree of liquidity. Under these policies and with the large volume of short-term securities held by banks, excess reserves no longer have the special significance for bank liquidity that has been attached to them in recent years. In general, however, most banks continue to carry some excess reserves and there appear to be a few which have the clear policy of not allowing their excess reserves to fall below certain fixed levels."

⁵⁷ *Ibid.*, p. 10.

conclusion that after the war monetary control instrumentalities will be subject to severe limitations.

During World War I commercial banks helped to finance the war chiefly through advances to business and by means of collateral loans to individuals enabling them to pay for their purchases of government securities. For example, by the middle of 1919 commercial bank loans and discounts constituted 70 percent of total earning assets, while only 12 percent of bank assets consisted of government securities purchased in the open market.⁵⁸ As loans were paid off in 1920-21, deposit liabilities were reduced, reserves were released in consequence and to some extent currency was paid into the banks and retired. Thus contraction of deposits and currency occurred automatically, and at the same time banks were supplied with additional reserves to support a subsequent expansion of credit.

Until budgetary deficits are reduced sufficiently to permit the government to obtain all borrowed funds from nonbank sources, commercial bank holdings of government securities will probably continue to increase. Furthermore in the postwar period the reconversion needs of business and the desire on the part of consumers to obtain durable goods and re-establish living standards may shift outstanding securities into the banks. Given a high degree of employment that stimulated spending, such a shift would add to the monetary pressure upon the price structure.

THE PATTERN OF INTEREST RATES

The pattern of interest rates that has obtained during the war—rising with maturity from $\frac{3}{8}$ percent on 3-month Treasury bills to $2\frac{1}{2}$ percent on long-term bonds—is in general the same as the one which existed before war began. Its stability has been the result of the action taken by the Federal Reserve Banks through open market operations and adjustments to member bank reserve requirements, and by the Treasury in adapting its new offerings to investor needs.

Daniel W. Bell, Under Secretary of the Treasury, in an address on "Financing of War and the Post-War Readjustments" in December 1943 referred to the stability of the interest rate structure on government securities which existed despite the tremendous increase in offerings by the Treasury, and stated that confidence in its continuation has been and is widespread, and well justified. This

⁵⁸ Board of Governors of the Federal Reserve System, *Annual Report, 1919*, p. 112.

stability, he affirmed, had resulted in broadened subscription to the offerings in the successive war loan campaigns by eliminating any prospective gains that might arise from withholding funds in anticipation of higher rates. In addition, Mr. Bell expressed the belief that public opinion in both the United States and Great Britain had been revolutionized as to fair rates of interest on government war borrowing, that the revolution in public opinion was soundly based on underlying economic realities, and that this attitude would be applicable to the coming peace period.⁵⁹

In an address prior to the Sixth Loan Drive, Secretary of the Treasury, Henry Morgenthau underscored Mr. Bell's observations, projected them into the future, stating: "Personally, I do not anticipate a rise in interest rates in the foreseeable future. Savings are abundant and promise to be adequate to meet all likely needs. . . .

⁵⁹ The problem has also been dealt with by fiscal or central banking officials of other United Nations. In his budget speech before the House of Commons on April 12, 1943, the late Sir Kingsley Wood stated: "During this war we have stabilized the general complex of interest rates at a level so low as would have been thought impossible by anyone who merely based himself on the experience of the last war. We have developed a new technique in these matters, and we have revolutionised public opinion as to what are fair rates for Government war borrowing. Thus, not merely shall we pass from war to peace with rates on a low level, but the country is, I am sure, also expecting that reconstruction and development after the war shall have the benefit of cheap money. It is the Government's intention to maintain its present policy of cheap money after the war as well as in the interests of the Exchequer itself."

In his *Annual Report* to the Minister of Finance for 1943, Governor G. F. Towers of the Bank of Canada stated: "At a meeting of the Board of Directors on February 7th, 1944, it was decided to reduce the Bank Rate to 1½ per cent, effective February 8th, from the 2½ per cent level which had been maintained since the Bank's establishment in 1933. . . .

"The change to a 1½ per cent rate does not mean that the Bank expects its credit facilities to be needed on a much greater scale in the future than in the past. Nor does it mean that under existing war conditions there is any less need for people to save. The utmost effort to maintain and increase our saving is still necessary, and the first and foremost concern of financial policy must be with winning the war. The stage has now come, however, when many are also having to give thought to the economic problems which will arise after the war.

"One factor which will affect decisions is the prospective cost of borrowing. It therefore seems appropriate that the Bank should, by reducing its Rate, signify its intention to continue the kind of monetary policy which has brought about the current level of interest rates. A policy aimed at higher interest rates would only become intelligible if, after war shortages are over, consumers' expenditure and capital development were to proceed at a rate which would overstrain our productive capacity. I see no prospect of such a situation arising in a form which would call for a policy of raising interest rates."

Just as I see no reason for substantially higher interest rates in the postwar period, I do not see any need for a wholesale postwar funding of the public debt into long-term bonds. . . . Certainly the day is past when the United States Government need ask its citizens or its business enterprises to insure it against changes in the rate of interest.”⁶⁰

Certain critics of the financing program maintain, however, that the low rates of interest obtainable on short-term and medium-term government obligations encourage the lodgment of an unnecessarily large proportion of federal debt in commercial banks. They further assert that there is need for a type of short-term obligation that would attract more funds from business concerns with cash reserves. As evidence of the lack of suitable investment outlets of this kind they call attention to the extraordinarily large volume of cash reserves held by small and medium-sized businesses.

Demands are also heard for higher rates of interest on long-term issues as a means of attracting a larger volume of individual cash holdings. The Treasury is, however, of the opinion that a decidedly sharp rise in interest rates, in view of the tax structure, would be required to bring about a material expansion of security sales to nonbank investors. It relies on patriotic appeals to provide the prime stimulus to investment at current low rates. Moreover, whatever opinion one may hold about the deterrent effect of low interest rates on investment buying, it has clearly become impractical at a late stage of the war to raise interest rates on longer-term issues, thereby bringing about a fall in the market value of outstanding negotiable bonds. However, increases in short-term rates might be feasible, with long-term rates remaining stable. The Federal Reserve Board of Governors stated in 1943 that “short rates, after a sharp rise from the low point reached in 1940, are still low compared with past periods and could advance further in response to market conditions without affecting the rate on long-term money.” The Board of Governors added, “Prospects are that conditions in the postwar period will favor the continuance of low long-term rates.”⁶¹

A rise in short-term rates in relation to long-term rates would have the advantage of reducing profits from price appreciation of long-term issues and hence discourage “riding the interest curve.” Com-

⁶⁰ Address in Los Angeles, October 14, 1944.

⁶¹ Board of Governors of the Federal Reserve System, *Annual Report, 1943*.

mercial banks, would be encouraged to expand their holdings of higher-yield short-term issues, and to dispose of longer-term issues. The rise in short-term rates, however, would doubtless necessitate purchases of these longer-term issues by the Federal Reserve Banks as a means of supporting the market and preventing an advance in long-term yields.

The pressures to maintain the existing pattern of interest rates on government securities will remain heavy during the war. They will also undoubtedly be great after the war. At that time, the Treasury will have a large refunding task and many investors, remembering the losses suffered by some bondholders following World War I, will want the market stability to continue in order to protect the market value of their holdings. Concurrently the Federal Reserve Banks may have a problem of using their powers to help check postwar inflation if nonbank investment in government securities is not adequate.

The wartime pattern of interest rates is by no means typical from an historical standpoint. While a pattern characterized by higher rates on long-term securities has prevailed for the past 14 years, data on yields of the highest-grade corporate bonds as of the end of the first quarter for each of the past 45 years show that such a pattern has prevailed in only 15 years altogether; in 19 years, short-term rates were higher than long, and in 11 years rates were identical in both sectors of the market. The year-to-year movement of short-term rates on high-grade corporate issues corresponded closely with that of money rates over this entire period, and was much wider than that for long-term interest rates.

One of the disadvantages of stabilizing a pattern of interest rates in which short-term rates are lower than long-term rates for an extended period, is the incentive such stability gives commercial banks to lengthen the maturities of government security holdings, and thereby to benefit from the higher yields on longer maturities. Such a tendency obviously runs counter to the declared objective of Treasury war finance of restricting bank investment in government securities to short maturities. The apparent intent is to keep the market value of bank holdings of governments as stable as possible should the stabilization policy be modified or abandoned. Provided banks are amply supplied with short-term issues to meet current demands for cash, declines in the market values of long-term issues

would not affect them materially, unless they tried to liquidate longer term holdings in the open market instead of holding them to maturity, or were compelled to revalue them at current market prices.

POSTWAR RESTRICTIONS ON USE OF GENERAL CREDIT CONTROL INSTRUMENTS

The extension of a stabilized pattern of interest rates indefinitely into the postwar period would admittedly limit the freedom of action of the Federal Reserve authorities in the use of their general credit control instruments. Assuming that postwar conditions call for application of restrictive Federal Reserve credit policies, the question arises of the effect of selling government securities in the open market, raising reserve requirements, or advancing discount rates.

It seems possible that member banks may have a small margin of excess reserves at the close of the war, which open market sales by the Federal Reserve Banks might absorb without disturbing the existing pattern of interest rates. By allowing issues to run off and selling a limited volume of securities from time to time to banks with surplus funds to invest, contractions of credit might be encouraged without inflicting hardships upon individual banks. Continued purchases by nonbank investors, however, would be essential to stabilization. If the Reserve Banks have to act on a large scale to accomplish the objectives of credit policy, it is possible that the interest structure may be subject to strain and that market values of long-term marketable bonds may depreciate somewhat. This would result if the short-term rates were raised and remained above long-term rates for an extended period. In these circumstances, investors would be encouraged to favor short maturities as against long-term issues, thus tending to increase long-term interest rates. Pressure on long-term interest rates would also be increased if a strong demand for long-term capital should develop.

Raising member bank reserve requirements substantially would likewise put pressure upon the pattern of interest rates in the government securities market, since some member banks might be forced to liquidate security holdings.

The third restrictive weapon—an advance of the discount rate—would have little immediate effect by itself in bringing about a

contraction of bank credit unless member banks were heavily indebted at the time. It might, however, discourage excessive borrowing if member banks needed to obtain supplementary reserves in this way, and help to enforce other policies. The effect of changes in discount rates upon investor attitudes, moreover, might be immediate and sharp, and perhaps produce tensions serious enough to disturb the pattern of interest rates.

The employment of any one or a combination of these customary indirect methods of restricting bank credit would probably have unsettling effects upon the government securities market, at least temporarily. This disturbance would occur not because of the particular method or methods applied but because of the importance of government obligations in the asset structure of the economy, especially of commercial banks.

Instead of having to use restrictive credit policies the Federal Reserve Banks might be faced with conditions requiring the application of credit stimuli. In such circumstances the question arises whether it would be possible for the Federal Reserve Banks to bring about an expansion of bank credit without disturbing the interest structure on government obligations. Here again, the stability of the market would largely depend upon the supply of securities available for bank purchase, either from new Treasury issues or from sales of holdings by nonbank investors.

The efforts of the Federal Reserve officials to use the customary indirect methods of control, it seems clear, may conflict with a policy of maintaining a fixed pattern and level of interest rates. If the attempt to stabilize the interest structure were abandoned voluntarily or if conditions made it impossible to continue to peg interest rates, the officials of the Federal Reserve System might, in accordance with past practices, attempt to bring about an orderly transition to a higher or a lower rate level.

Should any of these instruments be used to effect a large contraction of credit, banks that had followed official advice to invest in government securities to the limit of their resources might find it expedient to adjust their portfolio positions. Any general contraction of bank credit ensuing from this action might reduce the earnings of many commercial banks and might bring about some capital losses. Under the circumstances, the Federal Reserve officials would have to anticipate these eventualities in formulating their

credit policies.

The fact that a rise in the interest level (i.e., the level of both short- and long-term rates) would subject some bank assets to book depreciation does not absolutely preclude resort to restrictive credit policies if the national interest would thus be served. It is easy to exaggerate the adverse effect upon the banking system of an increase in interest rates. A depreciation in market values of government securities would have most significance for issues having maturities of five years and over. Bank capital accounts provide a partial cushion against depreciation of these holdings if write-offs to market values should prove advisable, or if losses should be realized as a result of sales. As indicated earlier, moreover, procedures of bank examination authorized since 1938 have allowed balance sheet valuation at book or cost, less amortization, whichever is lower. Such a method of valuation protects the appraised value of bank assets against fluctuations in market prices and allows time for recovery of market depreciation as bonds approach maturity. For purposes of advances to member banks secured by government securities, where eventual repayment is assured, the Federal Reserve Banks may, of course, continue to appraise securities offered as collateral at par.

SELECTIVE CONTROL METHODS

The obstacles to effective credit control by the general methods discussed raise the question of the applicability in the postwar period of selective credit control methods similar to those employed during the war to restrict certain types of credit operations and encourage other types.⁶²

Credit control policies have of necessity both a selective and an over-all quantitative content. During the formative period of the Federal Reserve System, the emphasis of Federal Reserve credit policies was on the eligibility features of bank paper offered for rediscount, and hence was essentially selective in character. As the

⁶² Board of Governors of the Federal Reserve System, *Annual Report, 1943*, p. 10: "Economic stability depends on a complex of forces and policies, of which credit policy is only one. In order to be effective in bringing about stability the regulation of the availability and cost of money must be integrated with a flexible fiscal policy and at critical times reinforced by direct controls over prices, wages, and supplies. Further experience with selective credit controls, may also bring fruitful results."

System developed, increasing emphasis was placed on the over-all quantitative aspects of Federal Reserve credit however made available. In the early thirties attention reverted to the influence of Federal Reserve policies on bank credit in selected uses. In 1933 the Federal Reserve Banks were given the power to make advances to individuals, partnerships and corporations on their promissory notes secured by direct obligations of the United States Government. In 1934, the Federal Reserve Board of Governors was given authority to regulate margin requirements "for the purpose of preventing the excessive use of credit for the purchase or carrying of securities." Also in 1934, the Federal Reserve Banks were authorized to make direct advances for working capital needs to established commercial enterprises if accommodation could not be obtained from other sources. The war emergency has extended the Board of Governors' contact with the public by its regulation of consumer credit through Regulation W, and through its part in the administration of guaranteed war credits under Regulations V, VT and T.

Margin Requirements

Regulations governing credit extensions to finance security transactions have not been changed since November 1, 1937, when margins on security purchases were fixed at 40 percent and on short sales at 50 percent under the Board's Regulations T and U. A rising tendency in stock prices in 1942 and 1943, prompted the Board of Governors to consider the desirability of raising margin requirements. While no action appeared warranted by conditions prevailing, the Board took cognizance of the possibility that ". . . a runaway stock market might contribute to inflationary sentiment in the country as a whole."⁶³

The efficacy of increasing margin requirements on security transactions in the postwar period would clearly depend upon the conditions prevailing. Should rising stock prices develop as a result of cash transactions, the effects of such action would be restricted. It may be pointed out that in another field of investment—farm real estate—wartime values have been rising despite a steady decline in owners' debt.⁶⁴ Under conditions of abundant cash and liquid

⁶³ *Ibid.*, p. 23.

⁶⁴ U. S. Department of Agriculture, Bureau of Agricultural Economics, *The Agricultural Situation* (April 1944) pp. 12-17.

resources, rising prices are not necessarily associated with rising debt incurred to finance transactions. On the other hand, if a stock market boom were accentuated by margin trading, action by the Federal Reserve authorities would doubtless help to dampen, though perhaps not suppress, speculative enthusiasm.

Consumer Credit Regulation as a Postwar Selective Control

It has been argued that controls similar to Regulation W should be retained at least during the postwar transition period. The basis of this contention is that the great volume of liquid claims which consumers have accumulated constitute a serious inflationary threat and that sudden postwar abandonment of the restrictions might lead to excessive advances in the prices of goods generally sold to consumers on credit terms.

During wartime, administrative enforcement of Regulation W has been aided by the rise in consumer incomes and by the decline in the supply of consumer durable and semi-durable goods. With the return to peacetime conditions the practical or administrative difficulties of a consumer credit regulation similar to Regulation W would admittedly be great. However, simplifications in regulative procedures might facilitate its execution. It must also be anticipated that political opposition to an extension of consumer credit regulation into the postwar period may arise. Such opposition may develop because of alleged discrimination against those who do not hold any large amounts of liquid claims, or because of the allegedly adverse effects such regulation might have on output and employment in durable goods industries.

Even though consumer credit control as developed in wartime might be of only limited efficacy in the immediate postwar period, legislative authority for permanent consumer credit control may be sought in order to provide the Federal Reserve System with an instrument that could be used to restrain consumer spending in boom periods and to stimulate it in periods of depression. Whether a relaxation of restrictions imposed during a period of business expansion would be effective as a stimulus in time of recession is problematical, for this type of credit control operates as a brake and not as an accelerator. However, by lengthening the average debt period and by reducing the average down payment percentage on instalment purchases, "potential demand in lower-income levels may

conceivably be tapped for the consumption of durable goods.” Also, if average terms of sale with respect to down payment percentages and contract length on such purchases are liberalized, there will be an increase in outstanding instalment credit even if sales do not rise.⁶⁵ A relaxation of instalment credit terms that had been restricted on the upswing would thus tend toward increased consumer purchasing power at a time when it was especially needed.

Loan Guarantees and Direct Lending

Devices of the Regulation V and VT type designed to influence the use of credit in business channels will be extended into the immediate postwar period in modified form in the shape of T loans. Since government guarantees on T loans cease when contract settlements have been made, demands are heard increasingly for indefinite extension of loan guarantees as an aid to financing during the reconversion period and thereafter. Concerns unable for various reasons to obtain needed working capital may, nevertheless, be considered worthy of financial aid as a matter of industrial policy. A permanent system of guaranteeing commercial banks and other financing agencies against losses on loans of this kind may be evolved, with the Federal Reserve Banks acting as guarantors or as fiscal agents for guarantors—public or private.

The trend in this direction is evidenced by the introduction into the Senate and the House of companion bills (Wagner and Spence) to amend section 13b of the Federal Reserve Act by empowering the Federal Reserve Banks to guarantee financing institutions against loss of principal or interest on any loan made to a business enterprise and authorizing the Reserve Banks to make commitments to purchase from a financing institution any loan made to a business enterprise.⁶⁶ The procedure under the Wagner and Spence bills would be similar to that followed in financing V loans, but the Federal Reserve Banks would act as principals in this instance, not as fiscal agents. Losses on guarantees would be met from a fund of \$139 million placed under the control of the Federal Reserve Board of Governors. That sum equals the amount subscribed to

⁶⁵ See Gottfried Haberler, *Consumer Instalment Credit and Economic Fluctuations* (National Bureau of Economic Research, Financial Research Program, 1942) p. 172.

⁶⁶ These bills would in fact repeal the existing section 13b of the Federal Reserve Act, thereby eliminating direct lending and substituting therefor the system of loan guarantees.

the stock of the Federal Deposit Insurance Corporation by the Federal Reserve Banks in 1933. The Treasury was authorized in 1934 to make payments up to that amount to the Federal Reserve Banks to enable them to extend direct loans to business and industry. About \$27 million has accordingly been paid over to the Banks. Under the proposed measure, that sum would be transferred to the guaranty fund held by the Board of Governors along with about \$112 million turned over to it by the Treasury.⁶⁷

Further evidence of the increasing importance attached to loan guarantees is provided by inclusion in the surplus property disposal act of a provision authorizing the Smaller War Plants Corporation to make or guarantee loans to small business enterprises in connection with the acquisition, conversion and operation of plants and facilities. At present the SWPC is engaged in financing small enterprises, basing advances upon the need for expanding production and ignoring some customary elements in credit rating. The SWPC's repurchase bank loan plan is a method of guaranteeing banks against loss on loans of \$25,000 or less. The SWPC merely authorizes these loans; they are made and serviced by banks designated by the borrowers. The lending banks hold the collateral and receive interest on the loan, of which one quarter is paid to the Corporation in return for an agreement to repurchase the loan or the remaining unpaid balance in full on 15 days' notice.

Still another possibility would be some revision of the Federal Reserve industrial loan program under section 13b of the Federal Reserve Act which permits the Reserve Banks to make working capital loans up to five years maturity, when such loans are otherwise unavailable, or to participate in or underwrite such loans when made by member banks or by other financing agencies. Even though the amount of Federal Reserve industrial loans outstanding at any one time is limited under this section, the Reserve Banks still have a considerable unused margin of latitude for engaging in direct lending to business. With slight modification of the Federal Reserve Act this margin could be widened.⁶⁸

⁶⁷ See text of Senate bill 1918 introduced by Senator Wagner May 15, 1944 and referred to the Committee on Banking and Currency. Also for fuller explanation of the composition of the guaranty fund see, testimony of Marriner S. Eccles before the Senate Banking and Currency Committee, August 24, 1944.

⁶⁸ See "Industrial Loans of the Federal Reserve Bank of New York," Federal Reserve Bank of New York, *Monthly Review* (July 1944).

The unmistakable trend toward assumption of risks by the government through the guaranteeing and underwriting of loans made by private banks raises some controversial issues. Advocates of the policy maintain that an extension of the system of government loan guarantees need not threaten the existence of the private banking system. On the contrary, they argue that by assisting individual banks to perform services for the community that they would not dare undertake without government support, the private banking system is actually protected against government encroachment. It may, for instance, be considered desirable as a matter of national policy to make credit advances to borrowers who are not acceptable credit risks judged by customary banking standards.⁶⁹ In the absence of any provision for government guarantees of private loans, direct government lending would most likely be relied upon to provide the desired financial assistance. When testifying before the Senate Banking and Currency Committee in favor of the Wagner-Spence loan guarantee bill, Chairman Eccles stressed the argument that the proposal would provide a means of getting away from direct lending by government agencies and put the private banks in a position to compete with this type of government activity.

On the other hand objectors point out that willingness to take risks provides the chief peacetime justification for the profits of private enterprise. To the extent that banks and other private financial institutions are guaranteed against peacetime loss on their investments, they cease to function as risk-takers.⁷⁰ Safeguards against unsound private lending may also be weakened by guarantees against, and underwriting of, the risk of loss on assets. Furthermore, if government agencies did not limit their guarantees to loans that they believed could be used profitably and would be repaid according to the terms of the contract, they would need to

⁶⁹ If guaranteed loans are to be used as a means of influencing the use of credit in the postwar period, the guaranteeing Federal Reserve Banks must be administratively equipped to exercise judgment as to the amount and the purpose of such loans and be ready to increase guarantees at certain times, when especially needed, and reduce them at other times. Guarantees extended more or less automatically up to a fixed amount would not serve as control instrumentalities.

⁷⁰ At its annual convention, September 15, 1943, the American Bankers Association passed a resolution opposing government loans or loan guarantees in the postwar period. These loans were held to be unnecessary and "contrary to sound financial policy and the best interests of the American economy."

follow some general social plan for encouraging industrial expansion.⁷¹

FOREIGN FUNDS CONTROL

The problems that have been created for the Federal Reserve System by the demands of wartime financing are primarily domestic but may not be exclusively so after the war. At the present time the Treasury holds the dominant position in the determination of international financial policies because of its control over foreign funds, exchange stabilization operations, and transactions in gold and silver. Quite logically, therefore, it has taken the lead in formulating plans for postwar exchange stabilization agreements, although Federal Reserve Bank officials have been called upon for advice and have actively participated in discussion of the merits of the proposed International Bank for Reconstruction and Development; of the Treasury (White), and British (Keynes) plans, and of the compromise stabilization and foreign investment plans approved by delegates to the Bretton Woods Conference. The criticism of the White and Keynes plans, and the Bretton Woods compromise, has made it evident that they would operate, under certain conditions, to inflate the money supply of creditor countries, of which the United States would be one. The inflationary potentialities of any plan modeled after them are noted merely to suggest their importance for postwar problems of domestic credit control that are the concern of the Federal Reserve System.⁷²

The Federal Reserve authorities face a postwar problem in connection with blocked foreign balances and gold holdings earmarked for foreign account. For example, in case of a postwar boom the release of blocked foreign balances and earmarked gold for expenditure in this country would add to the inflationary pressure on prices by increasing deposit currency available for spending and by adding

⁷¹ For a discussion of the implications of government insurance of bank assets for free enterprise and the private banking system, see Federal Deposit Insurance Corporation, *Annual Report, 1942*.

⁷² See Friedrich A. Lutz, "International Monetary Mechanisms, The Keynes and White Proposals," *Essays in International Finance*, No. 1 (Princeton University Press, July 1943); John H. Williams, "Currency Stabilization: The Keynes and White Plans," *Foreign Affairs* (July 1943); Jacob Viner, "Two Plans for International Monetary Stabilization," *Yale Review* (Autumn 1943); J. H. Riddle, *British and American Plans for International Currency Stabilization* (National Bureau of Economic Research, Financial Research Program, Occasional Paper 16, December 1943).

to bank reserves. Moreover, if funds were used to buy scarce goods for export, the result would be to aggravate domestic goods shortages and make the problem of price control all the more difficult.⁷³ On the other hand, if the release of blocked foreign balances and earmarked gold for domestic expenditure were to occur during a period of demobilization unemployment and business depression, new export demands for the surplus products of overexpanded war industries might follow with beneficial effect. In these circumstances, earmarked gold released by the Federal Reserve Banks would increase member bank reserves, and ease credit conditions without unwanted inflationary effects.

The terms of the peace settlement, the policies likely to be followed by the United States in assisting in the restoration of world trade and reviving foreign investment activity, cannot accurately be foreseen. The disposition of our vast monetary gold resources and the fate of gold as an international medium of exchange likewise present problems of great importance, the solution of which will have to be sought through international agreements.

THE FEDERAL RESERVE SYSTEM IN REVIEW

During the three decades of its life the Federal Reserve System has had to adapt itself to an economy which has undergone rapid changes and wide fluctuations. Consequently, its operations have been exposed to and tempered by a diversity of economic pressures. War broke out in Europe in 1914 before the Federal Reserve Banks had been set up, and less than three years later the United States was drawn into the conflict. During the decade following the Armistice the country experienced two major speculative crises that resulted partly from methods followed in financing the war. The ten years preceding our entry into World War II witnessed an uninterrupted succession of budgetary deficits that brought about a huge expansion of federal security holdings of commercial banks.

In one respect, at least, our participation in World War II has simplified the credit control problems of the Federal Reserve authorities: it has enabled them to state their immediate objective in specific terms. As noted in the introduction to this discussion

⁷³ Sumner H. Slichter, "Foreign Trade and Postwar Stability," *Foreign Affairs* (July 1943).