MONETARY PROBLEMS FOLLOWING WORLD WAR II

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Address by Dr. Edison H. Cramer, Chief of the Division of Research and Statistics, Federal Deposit Insurance Corporation, before the Colorado School of Banking, University of Colorado, Boulder, Colorado, August 26, 1952

The material in your text book dealt largely with the international aspects of postwar monetary problems. The fact that I shall direct your attention here to domestic postwar monetary problems is not intended to imply that the international problems are less deserving of attention. However, the domestic postwar monetary problems of the United States have been similar in many respects to those of other major countries. They have also been similar to those of this country in prior war and postwar periods. In addition, the dominant position of the United States in the economic affairs of the world means that our handling of our own domestic monetary problems has a great impact on international monetary problems.

The similarity between the monetary problems of different times and different countries arises from the fact that there is fundamentally one monetary problem. That is the problem of maintaining the money supply--the amount of money in existence--properly adjusted to the needs of a stable, prosperous, and growing economy. Your study yesterday of the theory of money emphasized that its value (or purchasing power) depends upon the amount of money expenditures and the volume of things available for purchase. The amount of money expenditures depends in large part upon the amount in existence and in small part upon the rate at which it is spent. During times of actual or anticipated rapid growth in the amount of money, the rate at which it is spent by firms and

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individuals increases and the result may be inflation. During times of actual or anticipated decline below the appropriate rate of growth in the amount of money, the spending rate declines and the result may be deflation. That is to say, the rate at which money is spent will not by itself cause either prolonged inflation or deflation. However, it does aggravate the effect of changes in the amount of money. The government, unlike firms and individuals, can increase its expenditures without regard to rate or amount because of its power to create additional dollars.

In depressions the problem of adjusting the quantity of money to the needs of the economy becomes the overcoming of monetary deficiency. In times of boom and particularly in times of war or large expenditures for defense, it is that of preventing undue expansion in the money supply. In a postwar period the problem is that of providing a smooth transition from whatever monetary policies have been pursued during the war to the policies needed for maintenance of prosperity without inflation.

War finance and inflation. During World War II the Federal Government incurred large deficits, borrowing by issue of government securities to meet more than half of its wartime expenditures. The increase in the government debt from the end of 1941 to the end of 1945 was $220 billion. Of this amount, $100 billion was acquired by the banking and monetary system. 1/ Of the hundred billion, $69 billion was in commercial banks, $22 billion in the Federal Reserve

1/ The banking and monetary system is defined in accordance with the monthly table in the Federal Reserve Bulletin (see p. 666 of the June 1952 issue); i.e., to include commercial and savings banks, Federal Reserve Banks, the Postal Savings System, and Treasury currency funds. Banks in the possessions are not included.

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banks, and $9 billion in other parts of the monetary system. 1/ In return for government obligations the banks created deposit accounts for the Treasury which, when expended by the Treasury in payment for war materials and services, became part of the money supply held by the public.

As a consequence of this method of war financing, the commercial banks and other institutions making up the monetary system more than doubled their total assets. The amount of those assets, according to the Federal Reserve tabulation, increased from $91 billion at the end of 1941 to $192 billion at the end of 1945. Along with this growth in the assets of the banking and monetary system there was of course a corresponding growth in deposit liabilities and currency, so that our money supply also doubled in size. This chart shows changes in total "deposits adjusted and currency," which is the most commonly used measure of the money supply available for the use of individuals and business enterprises. 2/ The chart covers both world wars and the years immediately following them. You will observe that the money supply grew markedly also during World War I, but that in the period of deflation which began in 1920 a part of the increase was wiped out. A still larger portion was wiped out in the depression of the early 1930's.

The Federal Reserve System played a key role in financing the war because its purchases of government securities created the reserves which made possible the purchases by commercial banks. To facilitate war finance

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1/ The $9 billion was distributed as follows: $7 billion in mutual savings banks, $1 1/2 billion in the Postal Savings System, and $1/2 billion in Treasury currency.

2/ Monthly estimates are available in the Federal Reserve Bulletin (see p. 666 of the June 1952 issue).

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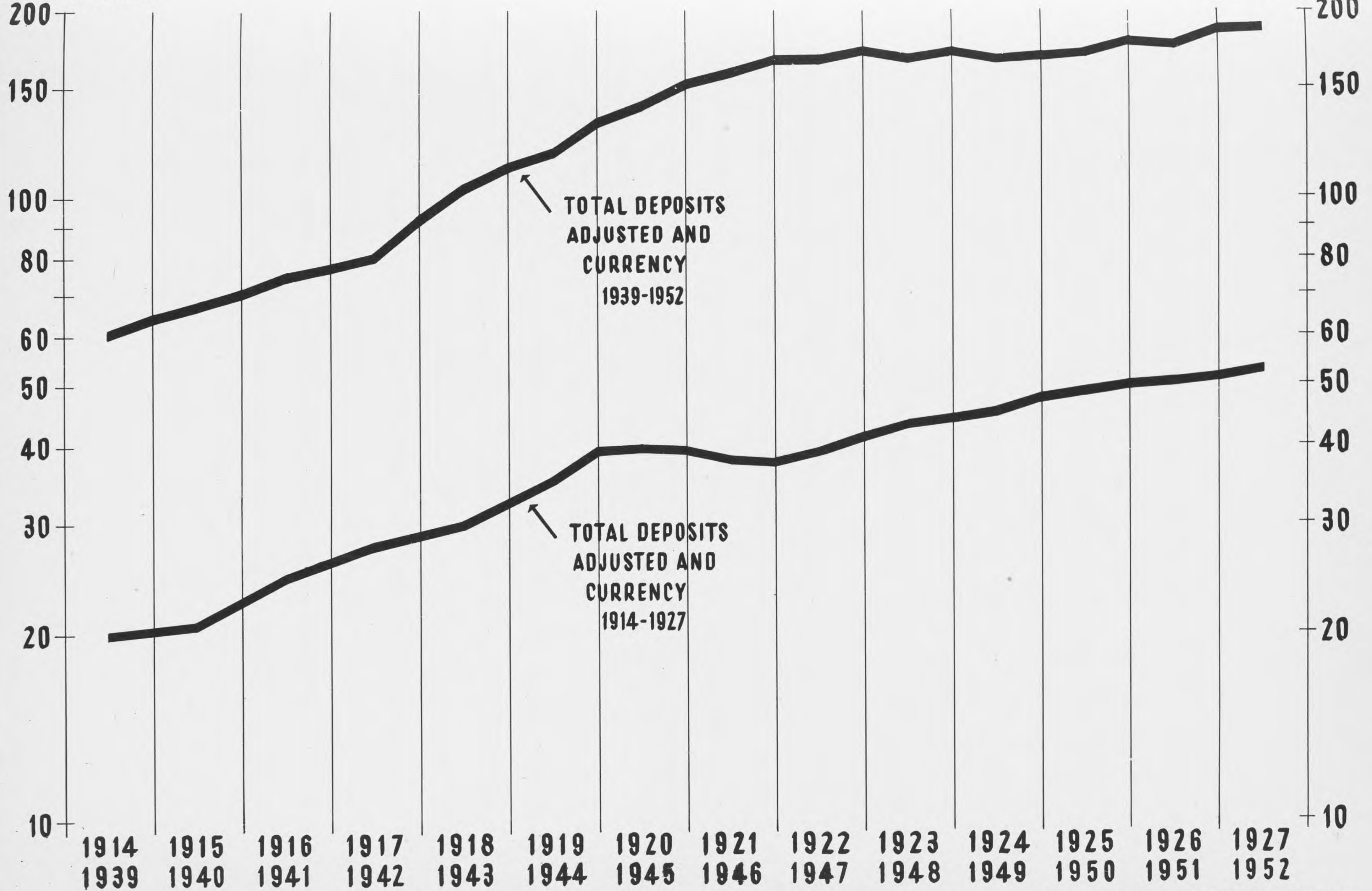
THE MONEY SUPPLY IN TWO WAR & POST-WAR PERIODS



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the Federal Reserve adopted a policy of supporting the market prices of government securities by buying them whenever their prices tended to fall below predetermined levels. This policy of supporting the prices of government securities was the same thing, differently viewed, as a policy of maintaining low interest rates on government securities, because the Treasury was thus assured of a market for its securities without need to increase rates of interest. The reserve position of commercial banks was made favorable to monetary expansion, since a bank wishing more reserves could easily acquire them at low cost by selling some of its holdings of government securities. Individuals or firms owning government securities were similarly given easy access to funds at low cost. Thus the purchases of government securities by the Federal Reserve during the war period were strongly inflationary in their impact on the economy.

As the money supply grew during World War II, its inflationary impact was partially offset by the tremendous increase in our output of goods and services. Total output, according to the Department of Commerce estimate of what is called "gross national product in constant dollars", was at its peak in 1944 and in that year was 36 percent higher than in 1941. Much of the increased output was military and not for sale to the public. Nevertheless, the fact that we could achieve this great increase in production made it possible to fight the war without the serious sacrifice of consumer goods that was necessary in other countries. That we could achieve such a growth in total production is also indicative of the extent to which we had allowed our standard of living to suffer unnecessarily in the depressed decade of the thirties. When the war ended, the reconversion of war industries enlarged the amount of civilian goods available for sale. This was a powerful anti-inflationary force for which we may be grateful.

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Thus during World War II both the money supply and volume of output were increased, but as the increase in money outran the increase in output strong upward pressure on prices developed. Against this inflationary pressure temporary bulwarks were thrown up in the form of direct price controls and rationing. In the absence of those controls the swollen money supply would have forced up prices until, at the higher prices, the demands for goods and services would have been kept in line with their supplies. With price and rationing controls, the demands exceeded supplies, so that we experienced "shortages" in which store shelves were empty much of the time for some types of goods and services and consumers accumulated large idle bank accounts. The effect of price controls, therefore, was not so much to _prevent_ inflation as to _postpone_ it, because of the large quantity of money which was accumulating and waiting to be spent as soon as opportunities to buy improved. This was the source of our postwar inflation problem.

The postwar monetary problem. Many bankers had serious difficulties during the deflation after World War I and again in the 1930's, and were therefore very apprehensive lest those difficulties return at the end of World War II. The problem at the close of the war was this: could the wartime inflation be halted without a serious deflation and depression? And if this could be done, how? And further, would it be done?

After the war had ended the monetary authorities were in a position to make a choice between alternative policies. There were three principal types of policy from which to choose.

First, the Federal Reserve authorities, after the end of the fighting, could have used their full powers to combat the inflationary pressures

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built up by war financing and temporarily held in check by price controls. They could have used these powers as vigorously as their predecessors had done in 1920 and 1921, when Federal Reserve bank holdings of government securities and of commercial paper were reduced by one-half. For comparable action after World War II, the Federal Reserve banks would have reduced their holdings of government securities about $10 billion or $12 billion. But if this powerful anti-inflationary weapon were to be used, price supports on government securities would have to be abandoned, for the Federal Reserve would have to enter the security market as a seller, thereby pushing down the prices of the securities.

Second, the Federal Reserve authorities could continue to support the prices of government securities by buying them whenever private holders or banks chose to sell them, but in so doing they would be supplying the public with new money and the banks with new reserves, even though this occurred in a time when prices were rising and there was little unemployment. In fact, they would thereby keep unused their sharpest tool for curing inflation, that of reducing bank reserves by selling securities on the open market.

The third kind of policy which the Federal Reserve authorities could choose at the close of the war was to follow a middle path between fostering further inflation on the one hand and forcing monetary contraction and bringing about deflation and depression, on the other. This would mean a prompt moderate reduction of the swollen money supply--just enough to take out most of the newly created money which had been held unused by individuals without impinging on the active portion; and when this had been accomplished, the provision of just enough increase in the amount of bank reserves to permit

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a reasonable rate of growth in the money supply.

What was the policy adopted in the face of these diverse possibilities? Fortunately, there was no attempt to follow the first course and produce deflation, as was done in 1920-21. The policy followed for several years appears to have been a sort of compromise between the second and third alternatives. That is, it was a policy of maintaining price supports for government bonds, but of also trying to stop the inflation without producing deflation. This compromise made it impossible to carry out the first part of the third type of policy, that of getting some of the wartime created money out of the economy before it became imbedded in the price structure, and before price control and rationing restraints were removed. It also made it impossible to use the most effective weapon for stopping inflation, that of selling enough government securities to put a strong brake on bank reserves. Yet the monetary authorities did succeed in bringing monetary expansion to a halt at the end of 1947.

The postwar monetary policy. The period of rapid postwar inflation in prices, representing principally the delayed effect of the huge increase in the money supply during the war, ran from 1946 into 1948. During this time the Federal Reserve used a variety of measures in the attempt to restrain the inflation. Margin requirements were raised from 75 percent to 100 percent in 1946, but lowered to the previous level in early 1947. Selective controls over consumer credit were continued after the war until their legal authorization expired in late 1947, and were reimposed under new legislation in September, 1948. And, of course, the powers of persuasion of the Reserve officials were used to encourage restraint by bankers and other lenders.

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The preferential rate for advances secured by short-term government obligations was abandoned soon after the war ended, but with this exception central bank rates remained at their low wartime levels until 1948. The rediscount rate on eligible paper was raised twice during that year. These increases were not of first order of importance, because banks were not significantly in debt or in need of borrowing from the Reserve banks. Nevertheless they reinforced the general upward movement of short-term interest rates which resulted from a more important step, the abandonment in July and August, 1947, of the wartime support levels on Treasury bills and certificates.

In December, 1947, another step was taken in the direction of higher interest rates. The Federal Reserve authorities, in their bond support program, had been maintaining prices of long-term bonds somewhat above par. On the 24th of that month they reduced these prices to bring them closer to, but in no case below, par.

No change was made in the reserve requirements of member banks from the end of the war until 1948. Except for banks in New York and Chicago these requirements were already as high as the law allowed the monetary authorities to raise them. In early 1948 the New York and Chicago requirements were boosted, and in September of that year, acting under new permissive legislation, the Board of Governors raised the requirements for all member banks by a moderate amount.

During 1947 and 1948 the Federal Government ran a surplus of tax revenues over expenditures, and thereby reduced the public debt. In the early part of 1948, when the receipts were heaviest, a portion of the budgetary surplus was used to retire Government securities held by the Federal Reserve

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banks, with the effect that some of the money withdrawn from the public by taxes was not returned to the public, but ceased to exist, and at the same time the commercial banks were deprived of an equal amount of reserves.

However, as we have noted, the policy of supporting the prices of long-term government securities was continued, so that the banks were able to maintain, and even moderately improve, their reserve positions over these years. Nevertheless the measures of restraint taken were sufficiently effective so that total loans and investments of banks did not grow during the period of rapid inflation, but rather decreased moderately. The corresponding decrease in bank liabilities was chiefly in those to the United States Treasury, so that the money supply held by the public continued to grow until the end of 1947. However, the growth in the money supply during the first two postwar years was at a less rapid rate than during the war, which emphasizes the fact that the postwar inflation was actually the postponed war inflation.

Large-scale open-market selling of securities by the Federal Reserve was conspicuously absent during 1946-48. Such selling, if undertaken promptly after the war and prior to the removal of direct price controls, could have undone part of the wartime growth of bank assets and the money supply, and could therefore have made the inflation less severe than it was. But it could also, if carried too far, have produced the postwar depression which was feared by so many people. Avoidance of such stringent action was surely one consideration in the minds of the postwar monetary policy makers. The war-swollen money supply had already become the working balances of business enterprises and the checking and savings accounts of citizens. To have withdrawn just the right amount of money would have tempered inflation without creating depression, but

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to know exactly what was the right amount would have been a difficult task, had it been attempted. The root of the trouble lay in our methods of war finance, which no postwar policy could have fully offset without producing the disaster of deep depression.

The postwar recession. By late summer of 1948 prices reached their peak and began to recede. This was several months after the peak in the money supply at the beginning of the year--a time lag which is typical of prewar experience. The downturn in prices was closely followed by a downturn in production, and by early 1949 signs and fears of recession were accumulating. The slump continued only into the last half of that year.

The end of the slump was preceded by a reversal of Federal Reserve policy. Central bank rediscount rates were not changed, but security loan margin requirements were reduced in March, and consumer credit controls expired with the law which had authorized them in June, 1949. Reserve requirements of member banks were lowered in a series of steps between May and September. However, the dollar amount of reserves of member banks was allowed to decline, therby offsetting part of the liberalizing effect of the reduced requirements. This decline in member bank reserves resulted from a reduction in the amount of government securities held by the Federal Reserve banks, i.e., from open-market sales or, what has the same effect, failure to replace all of the securities which had matured.

Nevertheless, the net effect of the reduction in reserve requirements and open-market sales of securities was to improve the effective reserve positions of the banks after the middle of 1949, and thereby to encourage the revival of economic activity. The revival occurred later that year, again a

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typical time lag between a reversal of direction in monetary policy and in business activity.

The Korean war inflation. With the invasion of South Korea, and the threat of another world war, the moderate and desirable recovery of the first half of 1950 was followed by a rapid and undesirable inflation of prices. The 17 percent rise in wholesale prices in the nine months beginning June, 1950 was about half as much as that which occurred during the same length of time following the removal of price controls in 1946.

This spurt of price inflation was not due to government military expenditures or deficit financing. In fact, the government was running a surplus in its budget over these months. Nor was it the sequel to an unduly rapid expansion of the money supply. Instead, it was a case of inflation caused by a rapid increase in the spending rate, induced by an anticipated increase in the amount of money and the possibility of a recurrence of wartime shortages. Business concerns attempted to build up inventories and to acquire capital equipment, and consumers splurged on durable goods, each in the attempt to beat the anticipated price increases and shortages. This produced a more rapid use of money, which was accompanied by higher prices.

Fortunately, the predictions of an undue rate of monetary expansion did not come true, except for a brief period in the closing months of 1950. As the price boom developed, the Federal Reserve authorities shifted from the expansionary policy of 1949 toward a contractive policy. The rediscount rate was raised in August 1950. Under new legal authorization contained in the Defense Production Act of 1950, consumer credit restrictions were reimposed in September. In the following month an entirely new kind of selective

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control, that over residential real estate, was imposed. Margin requirements were increased in January, 1951, and in January and February, member bank reserve requirements were again raised to the upper legal limits. In the early part of March a program to foster "voluntary credit restraint" was inaugurated under provisions of the Defense Production Act.

However, as in the early postwar period, these actions were accompanied by continuance of the bond support policy; and the latter was a greater barrier to successful pursuit of an anti-inflationary policy than it had been four years before. Short-term rates were closer to the long-term rates, and could not be subjected to much additional upward pressure without breaking the barrier on long-term bonds. There was a larger spread between yields on municipal and corporate securities and those on government bonds, resulting in more incentive for owners of the latter to sell them at the pegged prices. The fear of a post-war depression had vanished, and there was less reluctance to take full advantage of current opportunities for fear of a later slump. It was becoming apparent that the inflationary tendency of the bond support policy was likely to outweigh whatever anti-inflation devices could be used while maintaining the prices of government bonds; and the Federal Reserve authorities showed an increasing desire to get away from the bond price support policy.

Finally, in late March 1951, there was reached an "accord" between the authorities of the Federal Reserve and Treasury, the most outstanding result of which was the abandonment of Federal Reserve support for long-term government bonds at fixed prices. The prices of outstanding bonds were allowed to fall so that their yields rose above the 2-1/2 percent upper limit which the support policy had maintained during and after World War II, and new bonds with

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limited marketability bearing interest at 2-3/4 percent were issued by the Treasury.

This new departure in postwar monetary policy represented a major step toward a return to reliance upon the traditional and fundamental technique of open-market operations as the chief tool of monetary policy. It proved to be effective. The prospect of capital losses discouraged banks and others from selling their government securities, and the higher levels of interest rates discouraged expenditures in such interest-sensitive areas as housing and durable capital equipment. The rate of monetary expansion was slowed down. Some of the basic indexes of economic activity, such as wholesale prices and industrial production, ceased to rise and gradually declined from the Spring of 1951 to the Spring of this year.

In May and June of this year, as it became apparent that the inflationary boom had been checked, though not yet turned so far downward as to be called a depression--even a minor one--the Federal Reserve authorities began to remove the various credit restraints other than those having a direct impact on bank reserves. Consumer credit restrictions--Regulation W--were suspended early in May and the voluntary credit restraint program, a week later. Regulation X, relating to real estate credit, was modified in June to liberalize credit terms and reduce minimum down payments on certain types of houses; and further relaxation of the restraints on real estate credit now appears likely. It should, in fact, be feasible to suspend this regulation before the end of the year. If this should be done, the return to the use of open-market operations as the dominant technique of execution of monetary policy will be complete.

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The past 15 months has been one of the few reasonably stable periods in our economic history with a high level of employment. The degree of price-level stability and the high level of employment of recent months is the sort of thing toward which public policy is and should be aimed. There is no reason why a defense economy needs to be an inflation economy. It is only necessary that we avoid large government deficits and that we finance whatever deficit is incurred by selling securities outside the banking system, or at least by selling to the banking system no more securities than it can absorb without resulting in more rapid monetary expansion than is needed by the growing economy. Nor is there any reason why, should it become possible to reduce military outlays, that a peacetime economy needs to be a deflationary economy. If and when the signs of another recession appear, prompt action to ease the reserve position of the banks, with its consequent expansionary influence upon bank assets, the money supply, prices, and production, can prevent the recession from becoming a depression.

In conclusion, I should reiterate that my remarks this morning represent my personal views only, and do not necessarily reflect those of the Federal Deposit Insurance Corporation. They have been focused on the degree of success which has been achieved since World War II in trying to follow a middle way between further inflation on the one hand and deflation on the other, and on how what success we had was brought about. In timely, appropriate policy, acting upon the level of bank reserves and the money supply, lay the answer to the monetary problems following World War II, as well as to the monetary problems of the preceding peacetime. And, whether we have peace or war, we shall continue to face this same broad problem of determining and

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obtaining an appropriate supply of money. If we continue and improve the kind of measures used since 1947, and especially since March, 1951, we may justly hold high hopes that we can avoid both inflation and deflation. An all-out war would make control of inflation extremely difficult, but all-out peace need never again result in deflation, depression, and unemployment like that in the early 1920's and early 1930's.

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