BANKING STABILITY--THE ROLE OF THE CENTRAL BANK

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Lecture 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 18, 1954

The conclusion to be drawn from our discussions so far is that banking stability--meaning stability with a reasonable rate of growth in the assets of banks and hence in their deposit liabilities--is essential for business stability. If we do not have banking stability--that is, if the aggregate assets and aggregate deposits of banks fluctuate erratically--business men and households do not have a stable circulating medium to use in their transactions with each other. If the aggregate amount of the cash balances--bank deposits and currency--held by business and individuals decreases, or fails to grow relative to the need for them, the result is uncertainty and hesitancy in business planning and in the normal spending of families. On the other hand, expenditure sprees are induced by unexpected increases in cash balances.

Yesterday we discussed the tendency of banks to acquire assets and thus to create deposits to the extent permitted by their reserve positions. To explain this tendency, we used a simple illustration of a depositor opening an account in Bank A with $1,000 in currency. We did not show where that $1,000 came from, and that is our subject for today. As we shall see, bank reserves like bank deposits are also created, and in much the same way. This leads us to the role of the central banking system in the maintenance or disruption of banking stability. A central banking system, consisting of 12 Federal reserve banks, together with the Board of Governors and Open Market Committee of the Federal Reserve System, has existed in the United States for forty years. It was established, according to the preamble to the Federal Reserve Act, "to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes." That the system was designed, through these means, to promote economic stability, was stated explicitly in the report of the Chairman of the Senate Committee on Banking and Currency, Senator Robert D. Owen, in reporting the bill approved by the Committee to the Senate. "The chief purposes of the banking and currency bill is to give stability to the commerce and industry of the United States, prevent financial panics or financial stringencies; make available effective commercial credit for individuals engaged in manufacturing, in commerce, in finance, and in business to the extent of their just deserts; put an end to the pyramiding of the bank reserves of the country and the use of such reserves for gambling purposes on the stock exchange." 1/

The title of the Federal Reserve Act, the names of the new banking institutions created by the Act, and the emphasis on concentration and mobilization of bank reserves in the Act and in Congressional

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1/ Report to accompany H. R. 7837, from the Committee on Banking and Currency, United States Senate, Report 133, 63rd Congress, 1st Session, p. 7.

committee reports all indicate that these purposes were expected to be achieved through the management of bank reserves by the Federal Reserve authorities. The emphasis on an "elastic currency" and the provisions for the issue of a new form of currency were also directed to this purpose, in order to avoid the drawing down of bank reserves when additional currency (pocket money) was needed. 2/

The need for managing bank reserves had become apparent during the latter decades of the nineteenth century. This need arose from the combination of three characteristics of the banking and monetary system: (1) the legal requirement that banks maintain so-called reserves of lawful money, or partially lawful money and partially balances in selected groups of banks, equal to specified percentages of their deposits; (2) a tendency of banks to expand their operations close to the limit of their reserves; and (3) an irregularity in the amount of lawful money available for reserves, due in part, as I have just said, to a fluctuating demand for lawful money for use as pocket currency. As a result the term "panic breeder" was often applied to the banking system.

25, 25 (12½ + 12½), and 15 (6 cash + 9 deposits)

The chief mechanisms of the Federal Reserve Act which were designed to make possible the management of bank reserves by Federal Reserve authorities were: first, the transfer to the Federal Reserve banks of part, and after 1917 of all, the required reserves of national

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2/ This purpose was explicitly stated in one of the most influential books published during the period of agitation for establishment of a reserve banking system: Banking Reform, edited by J. Laurence Laughlin (Chicago: The National Citizens League for the Promotion of a Sound Banking System, 1912), p. 18.

banks and other members of the Federal Reserve system; second, an authorization to the Federal Reserve banks to discount selected types of assets for its member banks; third, large powers were given to the Federal Reserve banks to purchase and sell certain types of assets on the open market; and fourth, an authorization to the Federal Reserve banks to obtain currency from the Treasury of the United States, with some of those same assets and some gold serving as collateral. By this ~~means~~ fourth authority additional pocket currency could be provided when it was needed without affecting the amount of bank reserves. In the Banking Act of 1935 another power was added to the foregoing, namely, authorization to the Board of Governors of the Federal Reserve System to alter, within specified limits, the percentage reserve requirements. This power makes it possible to alter the effective amount of reserves with no change in their dollar amount.

All of these techniques, except the last, have one common characteristic, namely, they are methods of altering the amount of assets, and therefore the liabilities, of the Federal Reserve banks. The liabilities of the Federal Reserve banks, leaving capital accounts and minor items out of consideration, are of two sorts: (1) Federal Reserve notes, which are really United States Treasury obligations for which the Federal Reserve banks have posted collateral; (2) member bank deposit accounts, which are both reserve and clearing accounts. The Federal Reserve banks do not, as you know, carry deposit accounts of individuals or business enterprises. This fact is very important in the operations of the Federal Reserve system, because it means that when a Federal Reserve bank acquires assets from an individual or business enterprise--such as a government bond or a bill of exchange purchased in the open market--it cannot pay the individual or enterprise, as a commercial bank might, by a deposit credit. The Reserve bank pays by a draft, or order, on itself which the purchaser will deposit in his own account in a commercial bank. This explains the source of the $1000 deposit in yesterday's example. ~~and~~ The commercial bank (if it is a Federal Reserve member bank) in turn will deposit ~~in~~ the draft in its account in the Federal Reserve bank. When that is done, the reserve account of that particular member bank, and hence the aggregate reserves of all member banks, is increased by the amount of the draft. Similarly, when a Federal Reserve bank sells some of its assets in the open market, or receives payment of an asset that has matured, the reserve account of some member bank is charged, and the aggregate amount of the reserves of member banks is reduced.

The foregoing leads to a simple principle of action for the Federal Reserve authorities if they wish to control the dollar amount of member bank reserves. If, for example, they wish to keep those reserves at a constant amount, they must keep at a constant amount the assets of the Federal Reserve banks. If they wish to make the reserves of member banks grow by 3, 4, or 5 percent per year, the Federal Reserve banks must acquire the requisite amount of assets. This they can do by an appropriate amount of rediscounting or open-market operations. Consequently by controlling their assets and leaving percentage reserve requirements unchanged, the Federal Reserve banks control the effective amount of member bank reserves; or, the Board of Governors can change the effective amount of such reserves by changing the percentage requirements while leaving the amount of Federal Reserve bank assets unchanged.

The powers of the Federal Reserve authorities to control the assets of the Federal Reserve banks have been enlarged and made more flexible by various amendments to the original Federal Reserve Act. However, the powers given to them by the original Act and the early amendments were very great; and the changes that have occurred, in fact, in the amount of member bank reserves have always been the direct consequence of the use of those powers. A look at the record will enable us to see how those powers have been used. Before we do this, let us take cognizance of a very simple fact about the economy: this is the need for growth in the circulating medium and consequently in bank reserves, as the population and productive powers of the country grow. That is to say, in looking at the record of Federal Reserve actions and their impact of member bank reserves, we must compare the results, not with stability in the sense of a fixed amount, but in the sense of an amount increasing in accord with a reasonable rate of growth.

Studies made by an economist on my staff at the Federal Deposit Insurance Corporation suggest that the needed rate of growth, for most of the period since establishment of the Federal Reserve System, has been close to five percent per year. The available statistical data are not good enough to make a very close approximation, but there is some indication that ~~three percent~~ something less than five percent may be adequate today.

Now let us compare the changes in the effective amount of member bank reserves, in various periods since the concentration of reserves in the Federal Reserve system, with ~~the~~ a rate of growth of ~~3 percent per year for recent years, and~~ 5 percent per year from the beginning of the Federal Reserve System to the close of World War II; and in the cases where we find large departures, with changes in the amount of the circulating medium and in business conditions. As we do this, we will also take notice of the character of Federal Reserve policy, or other circumstances, which produced the change in reserves.

Under the Federal Reserve Act all national banks were required to join the Federal Reserve System; and the percentage reserve requirements applicable to national banks were reduced, effective with the organization of the Reserve banks. This occurred near the end of the year 1914. Under the pressure of wartime conditions in 1915 and 1916, though the United States was not yet a participant, the banks expanded their operations quite rapidly. When bank reserves were fully concentrated in the Federal Reserve banks in June, 1917, percentage requirements were again reduced. Further, from that time to the end of 1919, the Federal Reserve banks assisted the United States Treasury in its war financing by freely discounting for member banks, and the result was a large increase in member bank reserves. With the previous reduction in percentage requirements, we can estimate--very roughly--that effective reserves nearly doubled during the 5-year period from the time the Federal Reserve banks were organized until the end of 1919. A normal growth, compounded at 5 percent per year, would have been less than 28 percent. The excessive rate of increase in bank reserves permitted the banks to acquire large amounts of government obligations and to acquire even larger amounts of loans so that their customers could "borrow and buy" Liberty bonds. The excessive rate of increase in bank assets was accompanied by about the same excessive rate of increase in deposits, and resulted, as is well known, in a rise in prices to a peak in early 1920 about double that of 1914.

Toward the end of 1919 the Federal Reserve authorities decided that their policies could be independent of the Treasury and that the inflation should be halted by the contraction of bank credit. Discount rates were advanced sharply, and extremely high rates were charged member banks which had been borrowing and continued to borrow most heavily. At first, the banks paid the high rates, in order to maintain reserves sufficient to avoid reducing loans to their own customers, but sold United States Government obligations with a consequent sharp break in the bond market. The Federal Reserve banks also reduced their holdings of assets acquired in the open market.

The consequence was a reduction, relative to a reasonable growth, or about 15 percent in reserves in about a year and a half. By this time prices had dropped severely and business had slumped badly. The action of the Federal Reserve authorities had been far more severe than was needed simply to stop the previous inflation. There is evidence that the Federal Reserve authorities recognized the difficulty of taking enough but not too much action; but it is clear that they believed that an actual deflation of credit--i.e., monetary contraction--was necessary. It is understandable that in this first effort to stop inflation they did not realize how precise and delicate the monetary machinery is, and therefore seriously misjudged how much downward pressure was needed to stop the inflation without producing a business depression.

By the middle of 1921 the impact of monetary contraction was evident, and the Federal Reserve authorities reversed their policies. Discount rates were reduced and the Federal Reserve banks bought United States Government obligations and other assets in the open market. The increase in total Federal Reserve bank assets resulting primarily from these actions, rapidly restored the depleted reserves--in fact raising them in the space of about a year and a half (from the summer of 1921 to the beginning of 1923) by approximately 10 percent in excess of the normal rate of growth. With the increase in circulating medium, prices started rising quite rapidly, and business began to boom.

In 1924, the Federal Reserve authorities again took action to curtail the rate of expansion of bank reserves and the circulating medium; but that action was much less drastic than in 1919 and early 1920. When signs of a slight recession appeared, the pressure on reserves was quickly reversed. The contractive action was repeated as business revived and showed boom symptoms in 1925 and 1926, and again reversed when a small recession occurred in 1927.

By 1928 and 1929, as business was prosperous again, it was widely believed among economists that Federal Reserve authorities had learned how to use their powers to provide the banking stability needed for business stability, and would continue to use those powers for this purpose. In retrospect, this belief appears to have been justified, both because of the high plateau of prosperity of the 1920's with only slight recessions in 1924 and 1927, and because deviations in effective reserves from a reasonable line of growth were kept within a fairly narrow range. Moreover, the banks did in practice utilize all--or practically all--of their reserves.

But in 1928 and especially in 1929, the Federal Reserve authorities found themselves in what they thought was a dilemma of policy. For some time they had been worried about speculation, and were disturbed that they had not succeeded as much as they should in stopping the use of bank reserves for "gambling purposes on the stock exchange" to which the Chairman of the Senate Banking and Currency Committee had referred when the Federal Reserve Act was being debated in 1913. When the Federal Reserve authorities found that the moderately contractive reserve policy initiated in 1928 did not affect stock market prices or the proportion of member bank assets consisting of corporation securities or loans on securities, they decided to use more stringent action. Unfortunately, that meant abandonment of the criteria of reserve policy on which chief reliance had been placed during the preceding decade, namely, the degree of business activity, the presence or absence of a significant amount of unemployment, and the upward or downward direction of prices.

After the stock market crash had shown how violently effective the more stringent policy had become, the Federal Reserve banks used the traditional technique of reducing discount rates in an effort to stimulate business revival, but they did this under a set of conditions and policies that discouraged the member banks from reviving the practice of discounting on a large scale. Except for a few short intervals, and one longer one of about six months in 1932 when the Reserve banks under strong Congressional pressure purchased Government obligations, the amount of member bank reserves was permitted to decline, particularly when currency withdrawals and later gold withdrawals exerted a downward pressure on reserves. The entire reduction in member bank reserves from the peak in January 1928 to the trough in early March 1933 was nearly 30 percent in dollar amount. And also there had been considerable shifting of deposits from categories with low to those with high percentage requirements and a relative decline in the deposits of nonmember banks. When these factors and also a normal rate of growth over the 5-year period are taken into consideration, the shrinkage in effective reserves was about 40 percent. In my opinion and in the opinion of many other economists, there is no doubt that if the Federal Reserve authorities in the early 1930's had reversed their action and had returned to a policy of providing enough reserves to the banking system, the great depression of the 1930's would not have occurred. And if the depression had not occurred, the entire history of the world since 1930 might have been very different.

Five years with a shrinking circulating medium, as banks adjusted themselves to the dwindling reserves available to them, finally led to the banking holiday of 1933 and almost total economic collapse. With the change in administration and its abandonment of redemption of the currency in gold, bolstering of the banking system, and numerous activities to provide employment and promote recovery, currency returned to the banks. It was this return of currency and the change in the price of gold early in 1934--not the acquisition of assets by Federal Reserve banks through rediscounting or open market operations--that produced an increase in bank reserves after the banking holiday. The rate of expansion after the change in the price of gold was extremely rapid--the dollar amount rising three-fold by the end of 1936, and doubling again during the next four years.

In 1933 the President of the United States had announced a policy of restoration of the pre-depression commodity price level. With this governmental policy and the normal tendency of the banks to expand when they have increasing reserves, we would have expected a continuous expansion of the circulating medium--at a rate more than that needed for normal growth. This is in fact exactly what occurred for nearly four years after the banking holiday, though at a less rapid rate than the expansion in bank reserves. But late in 1936 and again early in 1937 the Federal Reserve authorities increased reserve requirements, and the expansion came to a halt for a year and a half. After this interruption, which was accompanied by a sharp business depression, the expansion of the circulating medium was resumed, at about the same rate as before. It continued to expand for another four years and then, with the outbreak of war, was accelerated. But it took more than ten years from the banking holiday before the price level of the middle 1920's, and a corresponding rate of business activity, were restored. This was one of the most stretched-out periods of recovery from business depression in the history of the nation.

You are familiar with the monetary policy used by our government to help finance the high expenditures of World War II. During the six years from the end of 1941 to the end of 1947 the stock of money, or circulating medium, more than doubled. This was made possible by the excess reserves existing at the beginning of the period, together with large additional amounts of reserves resulting from the acquisition by the Federal Reserve banks of United States government obligations. You are also familiar with the resulting price inflation.

The increase in effective bank reserves was brought to a halt after 1947 by a combination of policies which included abandonment of Federal Reserve wartime support levels on Treasury bills and certificates so that short-term interest rates rose toward the long-term rates, a lowering of the pegged prices for United States government bonds, an increase in percentage reserve requirements, and use of a Treasury surplus for retirement of Government obligations held by the Federal Reserve banks. This action was far less drastic than that taken after the close of World War I. The results on business were also less drastic. Prices reached a peak in the autumn of 1948 and there was a slight business recession in 1949. Moderate action, in conformity with what might have been expected from the history of the past, was sufficient to stop the inflation, and to do so with only a small business recession. The recession, in turn, was bought to a halt by an expansion in bank reserves.

Tables and Charts

For the five years beginning with 1949 effective bank reserves and the circulating medium have increased at a rate of 4.3 percent and 4 percent per year, respectively. This rate of growth has been sufficient to maintain a stable price level and fairly stable business. If the policy with respect to bank reserves that has been followed since 1947 is adhered to, we can be confident that we will continue to have business stability without inflation.