

## World War I and Postwar Adjustment, 1914-1921

Although created for the purpose of protecting the banking system from further convulsions, a goal unquestionably in the national interest, the fledgling Federal Reserve System nevertheless had an uncertain future. No welcome wagons were provided by local bank clearinghouses when the Federal Reserve Banks opened their new offices. On the contrary, many bankers were skeptical of the system and some were clearly hostile, describing it as unworkable or socialistic. It is true that national banks were required to come on board as member banks, but they could jump ship by abandoning their federal charters in favor of state charters. If few banks joined, the system would lack financial strength and influence. It was up to the officials of the Federal Reserve System to develop its latent powers and demonstrate its effectiveness if they could.

Control over the system was divided between the Federal Reserve Board in Washington and the boards of directors and officers of the twelve regional Federal Reserve Banks. It would take interpretation of various provisions of the act through official pushing and pulling, as well as further legislation, to determine over the years just how these powers would in fact be shared. Of the seven members of the Federal Reserve Board, two were ex officio members, the secretary of the treasury and the comptroller of the currency, so although the board was separate from the Treasury, the Treasury was "on the inside" of the board and might, it appeared to some, "capture" the board and control the system. The five other board members were appointed by the president with the advice and consent of the Senate. Each reserve bank was supervised by nine directors, six elected by member banks and three chosen by the board, an arrangement intended to provide a balance of political (public) and banking interests.

As to the system's purposes, we are familiar with the dominant ideas of furnishing an elastic currency and affording a means of discounting commercial paper. In addition the act instructs the Federal Reserve Banks "to

accommodate commerce and business.” Of course these objectives were meant to be supportive of the supreme objective of bringing an end to financial crises. It soon became apparent, however, that the focus on preventing financial crises raised questions concerning policy implementation. It was assumed at the start that the system should respond passively and automatically to the credit demands of business through the rediscounting process, but this attitude failed to address practical questions of the extent of central bank lending and the discount rate to be applied at any time. As they learned the craft of central banking and gained confidence in their techniques, the officials of the system “gradually broadened the scope of the system’s objectives and substituted a philosophy of positive regulation for that of passive accommodation.”<sup>1</sup> The broader, more ambitious objectives of general economic stability and stable prices came into prominence from within the system. Perhaps most important, the evolution of the Federal Reserve System involved more than a new institution finding its way in an existing set of conditions: the future development of the system would be conditioned by powerful new forces in the economic and social environment that were totally unforeseen at the birth of the Federal Reserve System.

### **The Fed Enters the Financial Arena**

In order to be accorded its proper place, the Reserve System must be looked upon as a national monument, like the old cathedrals of Europe, which were the work of many generations and of many masters, and are treasured as symbols of national achievement.

—Paul M. Warburg<sup>2</sup>

After the initial work of organization, the new central bank had to find its proper niche in the financial environment, in particular to develop suitable working relationships with the commercial banks and the Treasury. But before the system could integrate itself into the financial structure of the nation, the world began to change dramatically as the guns of August 1914 began to roar, marking the start of World War I (or the Great War, as it was called at the time). Although the United States was neutral at the outset of hostilities and planned to remain so, an atmosphere of uncertainty prevailed (the New York Stock Exchange was closed from August 1 to December 11) when the first Federal Reserve Board was sworn in on August 10, 1914. About three months later, on November 16, 1914, the Federal Reserve Banks opened for business, and for the next two and a half years, until the United States declared war in the spring of 1917, the system felt its way, concerned mainly with working out operating procedures.

What major monetary developments occurred during the period from

the outbreak of the war in August 1914 to the time the United States entered the conflict in April 1917, and how was the Federal Reserve System involved? Perhaps most important, the rock on which the international monetary system was thought to be built, the gold standard, was shattered as the belligerent countries left the gold standard. The Allies shipped massive amounts of gold to the United States in payment for supplies; during this period of American neutrality the U.S. gold stock rose by about \$1.3 billion, an increase of 82 percent over the prewar level. The gold inflow had the effect of increasing high-powered money, which in turn provided the basis for a rapid growth in the money stock.<sup>3</sup> The money stock increased by about 43 percent, and wholesale prices rose by about 77 percent. While the effects of the gold inflow on the money stock and economy of the United States were expansionary, the countries losing gold did not permit the deflationary effects called for under gold standard rules. In fact, prices rose considerably more rapidly in Great Britain and France, from which gold flowed, than in the United States. Wartime conditions required extraordinary measures: the Allied governments commandeered their nations' liquid assets of foreign balances, foreign securities, and gold to pay for urgently needed supplies. In ending the convertibility of their currencies into gold they intended only a temporary halt; and indeed, following the war the gold standard was briefly reestablished. Yet, although it would not become clear until later, from the standpoint of Federal Reserve policy, "the gold standard never again played the role that the framers of the act took for granted."<sup>4</sup>

If the Federal Reserve authorities had wished to neutralize the monetary effects of the flood of gold coming into the country, they could not have done so with the means at their disposal. If the Federal Reserve had had securities to sell on the open market it could have soaked up bank reserves, but at this early stage of its existence it did not hold a portfolio of bonds or other liquid assets to be used for this purpose. Under the circumstances it was a one-way central bank: it could pump out bank reserves by rediscounting paper or buying securities, but it could not reverse engines and draw reserves out of the system. The Federal Reserve Banks created a modest amount of credit at this time, thus adding to high-powered money. By acquiring a portfolio of assets they obtained a flow of income. Although not intended as profit-making institutions in the ordinary sense, the reserve banks saw no reason why they should not make a profit while carrying out their functions, thereby enhancing their independent status. On its opening day the Federal Reserve Bank of New York set its discount rate at 6 percent but quickly reduced it to 4 percent early in 1915, then to 3 percent in late 1916 and for most of 1917. When such "discount prices" failed to generate much rediscounting by the commercial banks, the Federal Reserve Banks went into the market and purchased bills and acceptances, as well as U.S. and municipal securities.

Some additional points are relevant to the period of U.S. neutrality. Initially member bank deposits in the Federal Reserve Banks came from the deposit of cash, that is, "lawful money" consisting of gold or other currency convertible into gold at the Treasury. At this early period the Federal Reserve System viewed the reserve requirements of the member banks as a means of facilitating the convertibility of bank deposits into currency, and not yet as a fulcrum for controlling the money stock.<sup>5</sup> Finally, the war began while economic activity was declining in the United States. The contraction ended in December 1914 and a vigorous expansion, propelled by rapidly mounting demand from Europe, lasted for three and a half years to a peak in August 1918.

### Financing U.S. Participation in the War, 1917–1918

We must, if possible, persuade . . . (Secretary of the Treasury McAdoo) to permit the Reserve Banks to become the real, active and effective fiscal agents for the Government. If he does that, our place in the country's banking system will be established for all time. If he does not, we will rock along for a good while, leaving people in some doubt as to whether we are fish, flesh, or good red herring.

—Benjamin Strong<sup>6</sup>

Following the declaration of war by the United States against Germany on April 6, 1917, the Federal Reserve System devoted itself to the financial requirements of the government. The methods used to carry out this supportive role until the Armistice ended the war on November 11, 1918, will now be discussed.

The entry of the United States into the war added to the demand for war production that had been in progress for several years, thereby intensifying pressure on the American economy to employ its resources fully and to direct a growing proportion of them into meeting wartime needs. What changed was the means of providing the money to pay for the growing output. The parts played by gold and by the Federal Reserve Banks were quite different from those of the years from 1914 to early 1917.

The gold inflow into the United States ended with U.S. belligerency; the size of the monetary gold stock was virtually unchanged from April 1917 to November 1918. Trade deficits of the Allies with the United States were covered by loans extended by the U.S. Treasury; the embattled European countries no longer needed to obtain scarce dollar exchange by exporting gold or by entering the private capital markets to float loans and sell securities. When U.S. trade with the rest of the world tended to cause a gold

outflow, the president on September 7, 1917, banned gold exports that were not approved by the Treasury as well as the Federal Reserve Board, and placed controls over foreign exchange. Thus the monetary role of gold during the period of American participation in the war was negligible.

The great wartime financial problem was how to raise the huge amounts of money required for the cost of this country's war effort plus loans to other nations. The national debt grew from about \$1 billion to approximately \$25 billion over a three-year period ending in mid-1919. Since tax receipts paid for about 30 percent of war costs, and straightforward printing of Treasury money was eschewed, roughly 70 percent came from borrowing by the Treasury. To assist the Treasury in raising funds, the Federal Reserve System performed two related functions: one was that of fiscal agent, and the other was to provide credit. Each deserves some explanation.

Section 15 of the Federal Reserve Act authorized, but did not require, the deposit of Treasury funds in Federal Reserve Banks, "which banks, when required by the Secretary of the Treasury, shall act as fiscal agents of the United States." Very little use of the reserve banks was made by the secretary before U.S. involvement in the war, perhaps due to lack of confidence in them, reluctance to forgo interest on deposits in commercial banks, and protection of appointive jobs in the Independent Treasury System then still in operation. Bureaucracies are hardly notorious for eagerness to hand over segments of their operations to other, potentially rival, organizations. From the standpoint of the Federal Reserve System, becoming the government's banker would add prestige, open the opportunity to perform important technical functions, and, by the transfer of Treasury deposits, add to the gold reserves of the Federal Reserve Banks. It may have been the persuasiveness of Federal Reserve officials, or Treasury Secretary McAdoo might have decided that he could use a helping hand, or both, for the reserve banks were made fiscal agents of the government. By collecting and paying out funds skillfully so as to keep the money market calm, and by managing the bulk of the securities that comprised the national debt, the Federal Reserve Banks performed a major service and earned coveted status and recognition. There was no question of the Federal Reserve System being independent of the Treasury in this area. Treasury officials had full authority to direct the reserve banks on fiscal agency affairs without consulting the Federal Reserve Board. After the war the Independent Treasury System, having become superfluous, was dissolved in 1920; the Federal Reserve Banks had become the principal fiscal agents of the government.

The strategy of financing the war was to do so out of savings. To the extent that society saved out of current income, and the savings were siphoned to the government, national output could be directed to fulfilling essential national needs with a minimum of inflation. Saving was of two types: (1) taxation (forced saving); (2) voluntary saving, by far the larger

share, which required persuading people to buy the Treasury's newly issued securities. It was necessary for bank credit to provide additional funds temporarily because the collection of taxes and the rate of voluntary saving lagged behind the surge of government spending. Ideally there would not be any permanent expansion of credit by the banking system.

When the Treasury, in the ongoing process of wartime finance, needed to get more money, it sold short-term obligations, mainly certificates of indebtedness, a large portion of which the banks bought by creating new deposits. Then when the Treasury received taxes and sold bonds to the public, it used the proceeds to retire the short-term debt and the associated bank credit. During the war four campaigns known as Liberty Loans were carried out and a postwar Victory Loan was floated in 1919. Great efforts were made to sell the bonds to the general public by appeals to patriotism. People were urged to buy bonds in amounts greater than they could pay for with their current funds by borrowing from the banks on the basis of the bonds as collateral. This of course meant credit extension and money creation by the banks. Treasury and Federal Reserve officials viewed such lending as superior to the sale of the bonds to the banks themselves, on the grounds that the people who owed the banks would be impelled to save in the future to pay off their debts. In the end, despite the efforts to avoid it, a very significant part of the increased national debt was financed by bank credit. At the end of June 1919 the commercial banks held about \$5 billion of Treasury securities, or 20 percent of the total, and in addition held some \$3 billion of loans on such securities.<sup>7</sup> Federal Reserve Banks and certain federal agencies held much smaller amounts. Still, some 75 percent of the total U.S. government debt was held by nonbank investors.

While fiscal agency and credit creation are conceptually separate functions, in fact they were closely linked. It was necessary that the bond drives be successful; the Federal Reserve System had to provide the economy with enough money to absorb the bonds; the banks had to have sufficient reserves to support the additional bank deposits; and the demand for more currency in circulation had to be met.

Total reserve bank credit outstanding rose from about \$280 million on the eve of U.S. entry into the war to \$2.5 billion by the end of 1918, most of the increase consisting of bills discounted. The heart of the Federal Reserve wartime credit policy was to lend at "preferential" discount rates to commercial banks with Treasury securities as collateral. Such rates were lower than for commercial paper and also were a fraction of a percentage point lower than the yield on the Treasury securities, giving the banks a profit. In other words, the Federal Reserve System as fiscal agent could raise all the funds the Treasury needed, because in its credit creating capacity it extended loans to the commercial banks to ensure the success of Treasury borrowing. The banks could borrow from the Fed to finance their own

purchases of certificates of indebtedness, and they could also borrow from the Fed by rediscounting their customers' paper taken for loans to finance bond purchases. In the latter case, the banks charged their customers the same interest rate as that paid on the Liberty Bonds, but could borrow from the Fed at the lower preferential rate.

When the gold inflow ended in the spring of 1917, the Federal Reserve took over as the source of monetary expansion. Between April 1917 and November 1918 the money stock rose by 19 percent; the wholesale price index rose by 17 percent to 107 percent over the 1914 level. The rate of inflation was slower during the period of U.S. involvement in the war than in the prior period reaching back to the beginning of 1916. Friedman and Schwartz point out that whereas the money stock rose proportionately less than high-powered money during the wartime period, it rose proportionately more in the immediately preceding and succeeding periods. In wartime the public held more currency relative to bank deposits than previously, so whereas the expansion of Federal Reserve credit added to high-powered money, the drain of currency acted as a partial offset to its expansionary effect.<sup>8</sup>

The credit creating method of the Federal Reserve System that has been described is a far cry from the real bills doctrine. Banks borrowed from the Federal Reserve on the basis of government securities at the preferential discount rate rather than on commercial paper at the ordinary discount rate; the preferential rate was the effective rate. As early as 1916 the Federal Reserve Act was amended to allow advances to member banks on their own fifteen-day notes, with either eligible commercial paper or government securities as security. Under these circumstances, the notion that the central bank would automatically expand the money stock in step with the legitimate needs of trade was vitiated.

It was in fact impossible for the Federal Reserve to regulate total lending by the banking system. By its policy of making sure that the banks had the needed reserves to lend to the Treasury directly and to the public to buy Liberty Bonds, it could not keep the banks from lending to other types of borrowers as well. Any time they wished, the banks could draw on their portfolios of government securities or loans made against such securities, tap the discount window of the regional Federal Reserve Bank, and so replenish their reserve balances. The result is quite instructive: commercial bank total loans and investments rose by twice the amount of their holdings of Treasury securities plus loans to finance Treasury securities. Whereas the Federal Reserve System intended that the war should be paid for out of savings as far as possible, and then found it necessary to extend credit to guarantee the successful flotation of all Treasury securities so that the financial needs of the government would be met, it found itself with the monetary reins slipping from its hands and the horse starting to run away. To try to keep the mon-

etary horse from bolting altogether, the Fed resorted to some new tricks that were not in the book. The Federal Reserve Board and the Federal Reserve Banks, hoping that the patriotic motive could check the profit motive, urged the bankers to cut down on lending for purposes considered nonessential for national needs. To avoid overtaxing the independent judgment of the lenders, a Capital Issues Committee was set up to screen private as well as state and local government securities issues, which may have had some effect in slowing the growth of credit. Federal Reserve Bank officers worked hard in supporting the efforts of public service organizations to get people to buy Treasury bonds. There was even brief and limited use made of a selective credit control, a margin requirement on stock exchange loans. As military victory came to be anticipated in the late summer and fall of 1918, stock speculation became a matter of concern. In New York City a subcommittee ("Money Committee") of the Liberty Loan Committee was set up and for a short time regulated the height of margin requirements through agreements with New York City banks and requested the members of the Stock Exchange to limit their borrowing.

### Post-World War I Adjustment, 1918-1921

The business cycle from 1919 to 1921 was the first real trial of the new system of monetary control introduced by the Federal Reserve Act. . . . Its poor performance in that trial is understandable. . . . There was a natural, if regrettable, tendency to wait too long before stepping on the brake, as it were, then to step on the brake too hard, then, when that did not bring monetary expansion to a halt very shortly, to step on the brake yet again.

—Milton Friedman and Anna J. Schwartz<sup>9</sup>

When the war ended, would the economy collapse or maintain its momentum during the transition to "normal" peacetime conditions? For some months the answer was unclear as the economy hesitated before resuming vigorous growth. With the termination of orders for war materiel, economic activity and prices began a gradual decline in the fall of 1918 that lasted until a renewed expansion began in the spring of 1919. A booming market for exports financed by government loans to wartime allies, together with a strong surge of domestic demand for civilian goods, drove up prices and incomes. From a low point in March 1919 to a peak in January 1920, the economy experienced an inflationary boom characterized by speculation in commodities (not in stocks), inventory accumulation, and spending on luxuries. From November 1918 to a peak in March 1920 the money stock (currency plus demand deposits) rose by 21 percent and wholesale prices by 15 percent—22 percent at their peak in May 1920. Then came the morning



after as the economy plunged from the first quarter of 1920 into a deep depression that hit bottom in the third quarter of 1921. We shall examine in turn the monetary policies employed in the boom and the following bust.

As the economy accelerated during 1919, the Federal Reserve Banks kept their discount rates low until late in the year. The New York Fed maintained a 4 percent rate until November, when it was raised to 4.75 percent before being jacked up to 6 percent in January 1920. Reserve bank credit outstanding increased from \$2.4 billion at the time of the Armistice to the \$3.4 billion level early in 1920 and held quite steady until beginning a descent late in the year. The bulk of the increase was in the form of bills discounted. This central bank credit expansion much more than offset a \$300 million external drain of gold between June 1919, when the embargo on gold exports was removed, until April 1920. High-powered money increased from approximately \$6.5 billion when the war ended to \$7 billion by the beginning of 1920. Clearly the Federal Reserve System failed to restrain the surging post-war inflation.

The Federal Reserve Board and officials of Federal Reserve Banks were quite concerned about the speculative boom. They discussed tightening credit, but in practice limited themselves merely to trying to persuade the banks to refuse to lend for nonessential purposes. They could instead have controlled the expansion of the money supply by selling securities that had been purchased in prior years and by raising discount rates. Monetary expansion was permitted even though it ran counter to the requirements of the gold standard during the period of gold outflow beginning in June 1919.

Why did the Federal Reserve System not adopt an effective program of credit restraint? Its first duty, it decided after some soul-searching, was to continue to defer to the Treasury. The end of the war did not end the Treasury's need for more borrowed money. In the spring of 1919 the final big war loan, the Victory Loan, was floated at an interest rate only slightly higher than for prior loans. Following the completion of the Victory Loan drive in May, the Fed kept interest rates low until November to assist the Treasury in funding its floating debt and also, apparently, to carry out a commitment to the commercial banks to keep the interest rate from rising on Victory Loan bonds for six months so as to prevent a decline in the price of the bonds held by the banks or on which they had made loans. We may recall that, in the spirit of the real bills doctrine, the Federal Reserve Act called for a policy of "accommodating commerce and business," but in accommodating the Treasury the Federal Reserve System was also accommodating the banks and their customers for reasons having nothing to do with real bills.

The failure of the Federal Reserve System to raise discount rates and restrict the expansion during the first half of 1919 is looked upon as the System's first big mistake. The Federal Reserve Board has been accused of

weakness at that time, of caving in to Treasury pressure. That the Federal Reserve Board had a difficult choice is beyond question. It had acted properly in teaming up with the Treasury *during* the war; how soon *after* the war should it have severed the partnership? By statute the chairman of the Federal Reserve Board was also the secretary of the Treasury, and so compelled to wear two hats, but by natural law he had only one mind to make up under them. In 1919 the secretary, Carter Glass, along with another influential Treasury official, Assistant Secretary Russell C. Leffingwell, were distinctly hostile to any tightening of the money market that might create difficulties for Treasury financing. The Federal Reserve System was wedged tightly between a rock and a hard place: cooperation with the Treasury, seen as a duty by the Board at the time, has been considered a cop-out by critics of the board. The unfortunate governor of the board, W.P.G. Harding, later pointed out that if the Federal Reserve had failed to cooperate with the Treasury, it might have been stripped of its power by executive order of the president. A wartime law then still in effect, the Overman Act, empowered the president to transfer any of the functions of the Federal Reserve Board to the secretary of the treasury.

Individual Federal Reserve Banks tried to get approval for higher discount rates at various times during 1919, but the board refused them. The board was torn between the two objectives of resistance to inflation on the one hand, and keeping the cost of Treasury borrowing low and preventing a fall in the price of Treasury securities on the other. As a new institution, the Federal Reserve was seeking to find its proper role while still under the dominating influence of the well-established and powerful Treasury. The Treasury's policies were to a large extent politically determined. A strong case has been made that the Federal Reserve Board should have been more persuasive and more determined in pressing the anti-inflation cause with the Treasury. If the Fed had acted to moderate the boom of 1919 there would have been less of a contractionary recoil in 1920–1921. In addition, the reserve position of the system would not have deteriorated so markedly.

In January 1922 the ten-member Joint Commission of Agricultural Inquiry of Congress, while recognizing the difficult positions of the system concerning Treasury financing, and exonerating it from a charge of discrimination against agriculture when the economy was subsequently deflated, took the view that the system should have raised the discount rate and restricted credit in the early part of 1919 despite the Treasury's problems. In effect, the commission's report to Congress blamed the Federal Reserve for failing to close the barn door before the horses of speculation and extravagance could get loose. Considering the much more powerful position of the Treasury, it seems inappropriate to concentrate on the Federal Reserve while ignoring the Treasury in policy determination. Indeed the case has been made that "the real blame lies not with the Federal Reserve System

(certainly not with the reserve banks) but with the Treasury and its insistence on low discount rates to aid government funding operations."<sup>10</sup>

Economic activity began to head down early in 1920, slowly at first but rapidly after mid-year, until bottoming out in the third quarter of 1921. The economy behaved like a roller coaster, with steeply falling prices, production, and employment. It subsequently rose again sharply, but the collapse, while short, was one of the steepest in our history. The money stock which peaked at \$23.9 billion in March 1920 fell by 14 percent in the next eighteen months to \$20.5 billion in September 1921.

Just as the economy reached a cyclical peak in January 1920, the discount rate at the Federal Reserve Bank of New York was made to take a big step up from 4.75 to 6 percent. At this time the Treasury abruptly switched its position to favor the increase. The economy was poised on the brink of collapse, its perilous position clear enough with hindsight but not at all obvious at the time; it was not until early autumn that the severity of the contraction came to be appreciated. What seems particularly perverse, however, was a further rise in the discount rate to 7 percent on June 1, a rate maintained for nearly a year as the economy plunged into deep depression. Then from May 1921 to June 1922 the discount rate was lowered gradually to 4 percent. If it was a mistake to have kept discount rates low in 1919, it seems inexcusable to have impaled the economy on high interest rates in 1920 and well into 1921.

Again, as in 1919, the Federal Reserve did not consider itself a free agent, this time because of the reserve requirements it had to meet. The Federal Reserve Act required a gold reserve of 40 percent against Federal Reserve notes and a gold (or lawful money) reserve of 35 percent against deposits. It was because of this requirement that the Treasury in January 1920, fearing forced departure from the gold standard, came out fervently in favor of higher interest rates. By early 1920 the ratio of the system's reserves to its deposit and note liabilities had fallen close to 40 percent. Not until the ratio had gone back up to 56 percent in May 1921 was the discount rate high-jump bar lowered a notch from 7 to 6.5 percent.

In one important respect the monetary system performed better than it had historically during a severe contraction. There was no panic—no rush by the public to convert bank deposits into currency or attempt by the banks to build up their reserves relative to deposits, although bank failures rose sharply from about 60 in 1919 to some 500 in 1921. When the war ended, the country had about 27,000 commercial banks, up some 2,000 over 1914, and the total grew to almost 30,000 by 1921.

The Federal Reserve was not really locked into a rigidly restrictive posture, for the Federal Reserve Act allowed the gold reserve requirement to be suspended by the board provided only that a very low graduated tax be applied to the deficiency. By adhering to the gold reserve ratio the Federal

Reserve sacrificed the opportunity to stabilize the economy. However, in judging the performance of the Fed it is only fair to keep in mind that orthodox thinking of the time was still under the spell of the gold standard. We should hardly be surprised that those who were appointed keepers of the ark gave more than lip service to the ideals of the creed with which they had been imbued.

Fierce criticism was directed at the Federal Reserve System as a result of the depression, particularly because of the drastic fall in agricultural prices. So great did the onslaught become that a resolution was introduced in the Senate at the request of the Federal Reserve Board itself for an investigation into the board's actions. Thus the Joint Commission of Agricultural Inquiry referred to earlier came to conduct its inquiry into monetary affairs. In less than a decade after it was created by Congress, the Federal Reserve System was investigated and found wanting by its creator. It was not considered fatally flawed, however, and the system was allowed to resume its development without modification, although Governor Harding paid the price of not being reappointed when his term expired in 1922. Any psychic pain that he suffered may have been assuaged by his appointment as governor of the Federal Reserve Bank of Boston at more than twice his old salary at the board.

The postwar experience of the Fed has been put in a nutshell: "The Federal Reserve, facing its first major test, could not be said to have passed with flying or any other colors. By common agreement it assisted the boom and worsened the bust. This has always been considered an especially interesting error."<sup>11</sup> Yet the establishment of the new central bank, despite its faults, may on balance be viewed as a constructive step.

The Federal Reserve did not prevent a strong inflation developing during the First World War; but neither did the Bank of England. By too strong a deflationary policy, it may have intensified the post-war depression; the Bank of England acted similarly. We cannot doubt that the troubles would have been far more severe if the United States had had to face the vast strains of war without a central banking organization.<sup>12</sup>