Reflections on the Early Development of Open Market Policy

By W. RANDOLPH BURGESS

Over the fifty years of its life, the Federal Reserve System has gradually been forged into one of the most important instruments for making money serve the economic goals of democracy. Nowhere is this process better depicted than in open market operations. For in them are interwoven two great endeavors.

One of these has been the effort to manage money in the public interest rather than treat it as a semiautomatic and somewhat occult mechanism.

The second struggle has been to subject money management to an effective *unified* control, while preserving the *local* and *practical* participation which is inherent in our concept of democracy. This is, in effect, the story of how the twelve Federal Reserve Banks, conceived in the democratic tradition as regional in spirit, learned to act in coordination with a Government Board, as one unit, inspired wholly by public motives.

How progress was made in these two directions is revealed in the early history of the Reserve System in which I was a young, eager, and enthusiastic participant.

ORIGINS OF OPEN MARKET PRACTICE

When the Federal Reserve System opened for business in 1914, there was little intimation that open market operations in Government securities would become a principal instrument of policy. The reports of the National Monetary Commission, known as the "Aldrich Commission", and other writings of that period pointed to the virtues of a "bill market", meaning bankers' acceptances, as an essential part of a broad international money market. This was largely by reason of its value as a means of financing trade and also as an avenue for the employment of short-term funds, in addition to the Stock Exchange call loan market. A bill market was regarded as necessary to make the New York money market broader and more attractive, and competitive with London. At that time, New York had no such market.

Federal Reserve participation in the bill market was to be for the purpose primarily of creating and nurturing the bill market. But it was also believed that a bill market would provide an almost automatic mechanism, along with member bank borrowing, for drawing Federal Reserve money into use when needed. This thinking followed closely the example set by the London money market.

One of the first people that Benjamin Strong, the first Governor of the Federal Reserve Bank of New York, sought out for his staff was a man familiar with the practices of the London bill market. He found him in the person of Edwin R. Kenzel, an officer of the Chemical National Bank, who knew well the mysteries of the market and applied his knowledge to encouraging the creation of bankers' acceptances and to opening up a market in which they could be bought and sold. Mr. Kenzel became the high priest of the bill market, who understood and ministered to its highly complicated operations. We younger officers of the Bank sat at his feet to learn, but were rash enough at times to question the sanctity of his conclusions.

The Reserve Bank was necessarily involved in the bill market, because the dealers needed a place to come for money at times when it was not available from the surplus funds of banks. Without such an additional source of funds, a bill market could hardly develop. This kind of operation resulted generally in putting Reserve money into the market at tight periods, usually, but not always, at just the times when the central bank should put money into the market. It was on this point that differences of opinion arose, for sometimes the bill market needed money when central bank policy called for restraint.

The fact is that the effort to transplant the market for bankers' acceptances into this country's financing machinery has not been very successful. A large proportion of short-term financing is still done through direct bank loans, and the bill market has never reached such size or become as large a factor in the money market and in Federal Reserve policy as had been hoped.

The other potential avenue for open market operations was the Government security market, and that was, at the beginning, a closed road. For there was, at first, no supply of short-term Government securities. Total Government debt was only about $1 billion and most of that was in the form of long-term bonds carrying the circulation privilege, which were closely held by national banks. It was only after the United States entered the war in 1917 that a real supply of short-term Government securities became available.

Federal Reserve operations in Government securities were at first dominated, not so much by broad policy considerations as (1) the need to provide the Treasury with a market for its securities, and (2) to help the earnings of the Reserve Banks. So open market operations as an instrument of credit policy did not really appear until 1923. Policy before then was expressed principally by changes in the discount rate.

An interesting indication of the absence of an "open market policy" is revealed in a speech on "Credit Control" given by Benjamin Strong in November 1922 at the Harvard School of Business Administration. In that speech to an informed academic audience, Governor Strong did not mention open market operations. His discussion was focused on lending policies and the discount rate. There is a corresponding gap in the Annual Reports and monthly publications of the Federal Reserve Board and the Reserve Banks.

THE GREAT DISCOVERY

The real significance of the purchase and sale of Government securities was an almost accidental discovery. During World War I member banks borrowed heavily from the Federal Reserve Banks, and the interest from these loans brought the Reserve Banks substantial earnings. But, due to the deflation of credit in 1921, a substantial return flow of currency, and heavy receipts of gold from abroad, the banks were then able to pay off a large part of their borrowings. Hence the Reserve Banks found their income cut to a point where they had difficulty in meeting their current expenses. So a number of the Reserve Banks went into the market in 1922 and bought Government securities to eke out their earnings.

Then they made two important discoveries. First, as fast as the Reserve Banks bought Government securities in the market, the member banks paid off more of their borrowings; and, as a result, earning assets and earnings of the Reserve Bank remained unchanged. Second, they discovered that the country's pool of credit is all one pool and money flows like water throughout the country. When Government securities were bought in Dallas, the money so disbursed did not stay in Dallas, but flowed through the whole banking system and reappeared in New York or Chicago or Kansas City, and vice versa. These funds coming into the hands of the banks enabled them to pay off their borrowings and feel able to lend more freely.

Two obvious conclusions followed from these results: first, the effect of open market operations had to be carefully studied as it was not what it appeared on the surface and, second, operations had to be treated as *System* policy, rather than as separate policies for each Reserve Bank.

There were no substantial historical precedents for this new venture in central banking. The Bank of England had seldom used the term "open market operations" as applying to Government securities, and when they did so they meant purchases or sales in small amounts for short periods for the purpose of market stabilization. Their funds reached the market mostly through the bill market; and the principal policy instrument was the discount rate at which bills were bought, and that was used mostly in response to changes in their gold reserves.

Indeed, in the early twenties, the position of the United States was unique in holding such large gold reserves that policy decisions were largely free from the dictation of protecting reserves. For the first time in history, a bank of issue could direct its policy decisions to the whole economic picture.

USE OF ECONOMIC ANALYSIS

In this situation, it was fortunate that the Reserve System had introduced into its organization the tools of economic and statistical analysis. The first Secretary of the Federal Reserve Board, Professor H. Parker Willis, from Columbia University, encouraged by Dr. Adolph Miller, a Board member, organized a statistical office for the Board (in New York) and began the publication of the *Federal Reserve Bulletin*. The New York Reserve Bank also set up an office for research and analysis, and began publishing a *Monthly Review of Credit and Business Conditions*. I was brought into the Bank in December 1920 to edit that publication. At that time, we had a Statistics Department of over fifty people, compiling and analyzing current statistics. Because of Congressional criticism of "fancy spending", we later called it our "Reports Department". The chief statistician was Carl Snyder, a man of wide experience and ranging mind, which he applied to a searching analysis of the relation of money and economic trends.[1]

Governor Strong and other officers of the Bank used

[1] The extended studies by Carl Snyder and his associates of the relation of business activity, the volume and velocity of money, and the movement of prices were reported in a number of articles in the *Journal of the American Statistical Association* and more fully in a book, *Business Cycles and Business Measurement* (New York, 1927) and his later book, *Capitalism the Creator* (New York, 1940).

our department to help them with operating problems. My first real contact with the Governor was in the summer of 1921 when he was called before the Joint Commission on Agricultural Inquiry of the Congress. He kept me and my associates busy analyzing the pertinent statistics and preparing charts for his testimony on monetary policy in relation to agricultural problems. This was the beginning of a close association. His inquiring mind sought out the facts—and theories—bearing on the problem he was trying to solve. He read widely, and loved to match wits with professors of economics, including such men as Sprague and Bullock of Harvard, Kemmerer of Princeton, and Hollander of Johns Hopkins. A few years later, when I was preparing a book, *The Reserve Banks and the Money Market,* Governor Strong, though ill and absent from the Bank, read every chapter of the manuscript and sent me voluminous and helpful comments written by hand on a yellow pad.

The research staff of the Federal Reserve Board was greatly strengthened in late 1922 by the appointment as its director of Walter W. Stewart, Professor of Economics at Amherst and a former associate of Professor Wesley C. Mitchell in the conduct of economic studies for the War Production Board. The Reserve Board's research office (Division of Reports and Statistics) was at that time moved from New York to Washington. Under Stewart's leadership, his office and mine worked closely together, and he soon gained the confidence of Governor Strong and other leaders in the Reserve System.

In this sort of atmosphere, the "discovery" of open market operations was followed promptly by a number of steps in their analysis, and organization for their execution.

OPERATING ORGANIZATION

At their spring meeting in 1922, the Governors of the twelve Federal Reserve Banks appointed a Committee of Governors of four of the Reserve Banks (later increased to five) to coordinate purchases and sales of Government securities at the request of the different Reserve Banks. In October of that year, the duties of the Committee were extended into the field of policy, and the Committee was asked by the Conference of Governors of the Federal Reserve Banks to make recommendations as to the purchase or sale of Government securities. The execution of these recommendations was carried out by the Federal Reserve Bank of New York. The Deputy Governor of the Bank in charge of these operations until 1930 was J. Herbert Case, a man of wide experience who commanded everyone's respect.

It was in the next few months that the people in the Reserve System generally began to recognize the significance of open market operations as an instrument of policy. This led to a clash between the Federal Reserve Board and the Federal Reserve Banks. The Board was not content to leave this potent mechanism solely in the hands of the Banks, and, in a stormy session with the Governors in March 1923, issued a ruling by which the Open Market Committee of five Governors was taken over as a Board-appointed committee and subject to its general supervision. In practice, this meant that the Committee would meet normally in Washington and submit its findings to the Board for approval or disapproval.

At the same time, the Board issued a statement of objectives of policy to make clear that open market operations should have the same aims as discount policy, as follows:

> That the time, manner, character, and volume of open market investments purchased by the Federal Reserve Banks be governed with primary regard to the accommodation of commerce and business, and to the effect of such purchases or sales on the general credit situation.

In view of ambiguities in the Federal Reserve Act, differences of opinion as to relative authorities in this and other matters were not surprising, and they were frequent. The arrangements for open market decisions arrived at in the spring of 1923 actually worked pretty well. They were supplemented in the autumn of that year by the establishment, by mutual consent, of a "System open market account" entrusted to the Committee of five Governors with the approval of its actions from time to time by the Federal Reserve Board. The securities purchased were prorated by formula among the Reserve Banks, which decided by vote of their directors whether to participate or not. This general plan was in operation until 1930, when, in response to pressure by several Reserve Banks, the Committee was enlarged to include the Governors of all twelve Reserve Banks and renamed the "Open Market Policy Conference"; the smaller group of five constituted the Executive Committee.

These various organizational steps had the effect of bringing about gradually the essential unity of action in a structure designed as regional. They moved the System away from the sort of semiautomatic mechanism visualized by the founding fathers to the exercise of deliberate decisions.

The 1923 action did leave some loopholes. Each Reserve Bank was permitted to decide whether it would participate in any operation, and it could in addition have independent accounts of its own. These privileges were at times exercised at some cost to unity and effectiveness of action.

It would have been a miracle if the whole leadership of the System had thus suddenly adopted a new interpretation of their functions and policies. The theory that the discount and bill windows could be relied upon to put out almost automatically the amount of funds that the country's economy really needed was deeply imbedded and persisted. That theory coincided with each Reserve Bank's pride in its own autonomy. There were also differences of view about the formula on the basis of which each Bank should participate in the System Account.

These last difficulties were finally eliminated only in the Banking Act of 1935, under which all Reserve Banks were required to participate in all System operations and lost the right to hold separate portfolios.

But, looking back, the process of gradually unifying the System in this essential operation, of making the Reserve System "one out of many", was surprisingly successful. The managements of the Reserve Board and the Reserve Banks, as they accumulated experience, saw the necessity for unity. In the early days, the leadership of Benjamin Strong had great influence for cohesion. The practices developed to deal with open market operations have also proved a unifying force for other System operations and the Open Market Committee has increasingly become an organ for discussion of many problems.

AGREEMENTS ON PRINCIPLES

Pari passu with these changes in organization was corresponding progress in what may be called the ideology of open market operations—the understanding of principles.

As part of the basic materials, Walter Stewart, and his staff, began in 1922 and in 1923 a series of studies of economic trends, including, for example, the compiling of a reliable index of industrial production, with the help of statisticians from some of the Reserve Banks, and using also the work of Professor Edward E. Day of Harvard. The liaison was especially close with the New York Bank, which was engaging in similar studies.

One result of Stewart's work appeared in the *Annual Report of the Federal Reserve Board for the Year 1923,* published early in 1924. That *Report* contained a full and careful statement of principles and consequences of open market operations as a major instrument of policy, supplementing the discount rate.

Of particular interest is the extent to which this discussion had moved away from the concept of the Reserve System as a mechanism responding semiautomatically to the demands made upon it to that of an organization responsible for taking the initiative. This appears in the review of guides to credit policy, which the *Report* recognized as including consideration of the quantity of credit (as well as the quality) to see that it is "neither excessive or deficient in maintaining credit in due relation to the volume of credit needs for the operating requirements of agriculture, industry, and trade". For this purpose, the *Report* said, the System must follow economic trends by the use of indexes of production, employment, trade, etc.

It is revealing to see how close this review of the objectives of policy comes to the stated purposes of the Employment Act of 1946. I can testify that these expressions in this 1923 *Annual Report* of the Board did indeed represent the broad objectives of System policy as they were considered by the Open Market Committee from that time forward.[2] Thus, very promptly after the "discovery" of open market operations, a mechanism had been set up for reaching decisions and executing them, and an understanding had been achieved by leaders in the Reserve System of principles which should serve as guidelines.

It was at this time that my own close association with the Open Market Committee began. I was invited to meetings, first as an economist, and prepared memoranda for the Committee on the economic and credit situation. Later I became Secretary of the Committee, and Manager of the System Open Market Account.

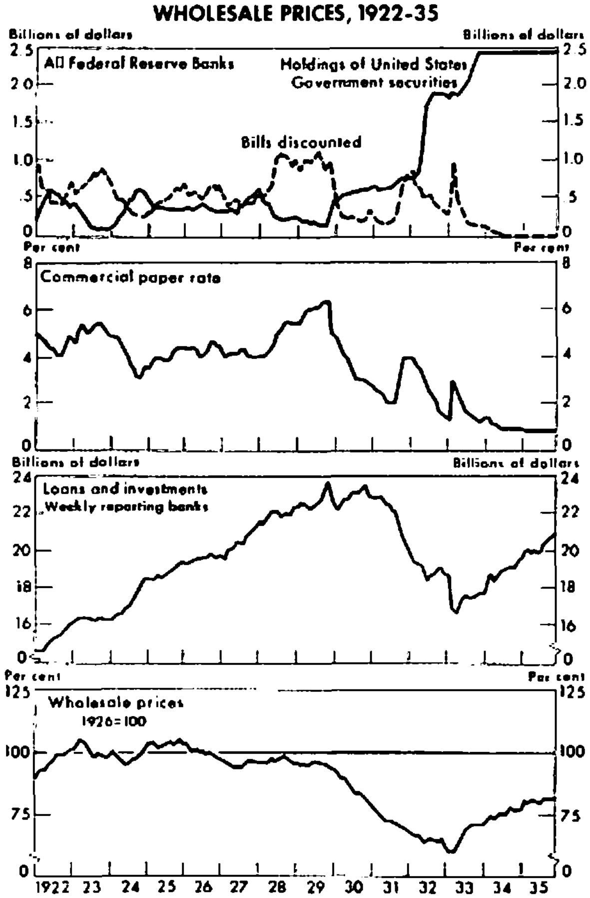
EARLY OPERATIONS—1923 TO 1928

As a framework for some comments on the actual operations undertaken in accordance with the foregoing organizational arrangements, it may be helpful to insert here two diagrams. One of these (Chart I) was included in the first edition of my book, *The Reserve Banks and the Money Market,* published in 1927. It was brought up to date and included in the second edition published in 1936. The other diagram (Chart II) was published only in the second edition. These diagrams show the principal changes in holdings of Government securities by the Federal Reserve System in relation to various factors in the economic situation, all of which were under scrutiny at the Open Market Committee meetings in the form of memoranda and charts.

[2] I should add that this same *Report* also included a section advocating as one policy instrument direct supervision by the Reserve Banks of the use of credit by member banks, a concept which represented the views of some members of the Federal Reserve Board, but was regarded by most Reserve Banks as theoretical and impractical. That difference in point of view was to impair the effectiveness of Federal Reserve action in the late twenties.

Chart I

FEDERAL RESERVE HOLDINGS OF GOVERNMENT SECURITIES AND BILLS DISCOUNTED IN RELATION TO COMMERCIAL PAPER RATE, BANK CREDIT VOLUME, AND WHOLESALE PRICES, 1922-35



Source: Burgess, W. Randolph, The Reserve Banks and the Money Market (Harper, 1936), p. 251.

There is logic in discussing as one unit the first five years of conscious open market operations from 1923 until Governor Strong's death in 1928. Not only was his the leading voice in decisions, but also there were several overriding influences upon action through the period. I am tempted to call this the tender period, when the action we took appeared to produce the results hoped for. Afterwards came the tough period, when nothing we did seemed to work well.

The operations in the early period seem small compared with the huge amounts of today. The largest amount of Governments purchased by the System Open Market Account in this period was $510 million from December 1923 to September 1924; and half of that was sold by March 1925, during a time of business recovery and rising prices. The next important operation was the purchase of $230 million in late 1927. This purchase came at a time when production and prices were showing some weakness, but when speculation was beginning to boil and bank credit was moving up.

Thus, the two major operations, after such transactions had become an accepted weapon of Federal Reserve policy, were in the direction of monetary ease. Both had the expected effects in enabling the banks to reduce their debt to the Reserve Banks; hence, they felt able to lend more freely. Money rates declined, bank loans and investments increased, industrial production turned up, gold imports slackened off.

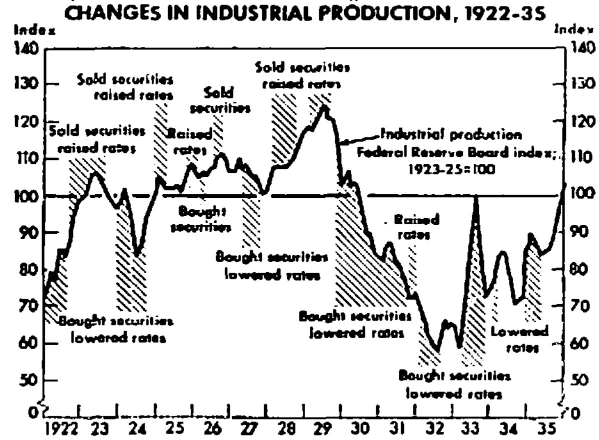
From the point of view of hindsight, these operations have been criticized as having fed the fires of inflation and laid the base for the great speculative boom. Since Governor Strong was the chief architect of these actions, it is interesting to recall his reasoning. In his mind, as I often heard him explain, this five-year period was one in which it was wise to lean on the side of credit ease, for several reasons.

One of these reasons was the condition of agriculture and farm credit. He had been greatly impressed by his appearance before the Joint Commission on Agriculture Inquiry mentioned earlier. Farm prices had taken a terrific tumble; farmers were in trouble; and farm banks were failing throughout the decade of the twenties. Postwar readjustments were still going on in other industries.

A second factor of increasing importance was the

Chart II

TIMING OF PRINCIPAL FEDERAL RESERVE POLICY ACTIONS* (SHOWN BY SHADED AREAS), COMPARED WITH CHANGES IN INDUSTRIAL PRODUCTION, 1922-35



* Purchases or sales of United States Government securities and changes in Federal Reserve Bank discount rates.

Source: Burgess, W. Randolph, The Reserve Banks and the Money Market (Harper, 1936), p. 249.

newly acquired international influence of United States financial policies. Europe was struggling for recovery and monetary stability after the great postwar depression, while America's influence, with her new strength relatively unscarred from war damage, was becoming ever greater. It was increasingly clear that United States monetary policies, which tended to make money easier or dearer, affected the flow of funds across the Atlantic. Gold was pouring in from Europe and building up a base for possible credit inflation. It therefore seemed desirable for this country to keep money rates as low and its lending markets as freely open as was consistent with domestic stability.

Governor Strong took the leadership in establishing relations between the Federal Reserve Bank and the Bank of England, and other central banks of Europe. He made a practice of taking a trip abroad every year to nurture these contacts, and European central bankers (Governors Norman, Rist, Schacht, Vissering, Franck, and Bachmann) returned the visits.

I well remember a meeting of the officers of the Federal Reserve Bank in the late spring of 1924 when the Governor, returning from a visit abroad, discussed with us the relation of these factors to our policies. Not many months later, the New York Reserve Bank was taking the lead in a credit to the Bank of England, to aid the British return to the gold standard.

Governor Strong and others were also always acutely conscious of the danger of speculative inflation in this country built on the flood of gold imports, which in the three years 1921 through 1923 had increased the country's gold reserves by 40 per cent. In fact, the economic discussions of that period are full of suggestions that, from the point of view of the world situation, an increase in commodity prices in the United States would be a logical and desirable result of these large gold imports. It would greatly facilitate Europe's recovery. Of course, in that case, higher security prices and speculative fever, a little inflation, would be hard to avoid.

Governor Strong had two answers to this threat. One was to follow a money policy which attracted as little gold as possible. The other was his belief that, if inflation began to flare up, it could be damped by vigorous monetary policies. At the beginning of 1928, he felt this was beginning to happen. In late February, George Harrison, Deputy Governor, who later succeeded Mr. Strong as Governor, and I went to see him in Atlantic City, where he was recovering from an illness. As always, he had been studying our daily reports of operations, and told us very vigorously that the New York banks were getting too much out of debt, were expanding credit, and that more restraint was necessary.

To meet this situation, securities were sold from the System account in the early months of 1928, in larger amounts than the purchases in 1927, bringing the total holdings by the System down to a minimum and forcing member banks to borrow up to a billion dollars.

Governor Strong's death in October 1928 really brought this period in Federal Reserve open market history to a close. As far as open market operations were concerned, the System had by that time used up almost all of its striking power for restraint, for it held very few more Governments to sell. It still had the discount rate to use and did so belatedly, but effectively, in August 1929.

The period from the death of Governor Strong to the stock market crash almost a year later was an unhappy one in Federal Reserve history, marred by serious disagreements. Since the problem was not one of open market policy a full discussion of it does not belong in this paper.

It was and is my belief that if the open market sales of securities in 1928, and discount rate increases early in the year, had been followed up promptly by further increases, as voted by the directors of the New York Reserve Bank and other Reserve Banks, the speculative boom could have been checked earlier, and the later terrible recession would not have been as severe.

But week after week by a split vote the Federal Reserve Board disagreed, and failed to approve the rate increases. The disagreement was not as to the dangers of the situation but as to methods of dealing with it. The dissenting members of the Board hoped that the result could be achieved by a kind of moral suasion upon the banks to reduce lending for speculative purposes, a quite impractical program. Back of this was, I believe, reluctance to take the responsibility for decisive action, having in mind the criticism incurred by the Board for increasing the discount rate in 1920. In the nature of the case, a board sitting in Washington is more conscious of the political hazards of action than those closer to the banking and business communities.

So I leave this question to the historians and go forward with the open market account.

THE SECOND STAGE— THE RECOVERY EFFORT, 1928-33

In anticipation of a possible serious break in the securities markets and business, the Open Market Committee began early to plan the use of its powers as an instrument for meeting an emergency. In a meeting with the Federal Reserve Board in August 1928, there was sober consideration of the economic effect of the monetary pressures then being felt: the 5 per cent discount rate and the heavy borrowing by member banks at the Reserve Banks. There was fear that money might not be freely available for moving the crops, or that there might indeed be a break in security prices and a serious credit strain, endangering the economy. It was decided that bankers' acceptances should be purchased freely at the prevailing rate of 4½ per cent. The purchase of up to $100 million of Government securities if an emergency should occur was also authorized with Board approval. The break, however, did not come at that time and no securities were then purchased under that authority.

The action taken at that meeting has quite properly been criticized as ambivalent. There was in reality no way of making credit easy for agriculture and business and tight for speculation. The money disbursed to purchase bills by the Reserve Banks at the 4½ per cent buying rate flowed into the whole credit structure and offset in part the pressures to check speculation. The only policy that might have worked to stop the boom would have been a prompt and vigorous use of the discount rate following the precedent of the Bank of England, which, whenever it raised its discount rate in such a situation, raised it by a full 1 per cent to show that it meant business.

For succeeding months, while the Reserve Board and the Reserve Banks quarreled over raising the discount rate, the Open Market Committee was largely on a standby basis. Its continued meetings were useful as a medium for discussion of policies, but it had no ammunition to use in the open market.

Then at last in August 1929, the Reserve Board consented to an increase in discount rates to 6 per cent, but again with the compromise that bill rates should be kept low. But the medicine worked. In October, the securities and commodity markets broke, and badly. In a near panic, out-of-town banks, and lenders other than banks, began calling their loans and pulling money out of the call loan market. In this situation the Reserve Banks took the action contemplated at the August 1928 meeting: they bought Government securities in substantial amounts to enable the New York Banks to rescue the money market from complete chaos. Then, and in the following months, the New York Reserve Bank and the Federal Reserve Board wanted to go further in purchases than the majority of the Open Market Committee was ready to go. But before long other influences operated to ease money. The considerable liquidation of bank loans released reserves, currency circulation declined, and gold came in from abroad.

These factors, continuing through 1930 and early 1931, enabled the member banks to pay off a major part of their debt at the Reserve Banks. By the summer of 1931 money rates had dropped and money was freely available. But all was not well. Industrial production and commodity prices were falling at home and abroad. The *Annual Report* of the Federal Reserve Bank of New York for the year 1931 described the situation as a "World Crisis of Confidence".

In September Great Britain suspended gold payments. France began withdrawing gold from New York. Gold exports and currency hoarding again drove the member banks heavily into debt at the Reserve Banks. Rumors were in the air. In late September, Governor Harrison sent me to a meeting of the Governors of European Central Banks at the Bank for International Settlements at Basle, to explain that our newly organized National Credit Corporation to help banks in trouble was not an engine of inflation. In reality, it was not half strong enough medicine to cure the disease. Passing through Paris, I helped prepare some explanatory articles for the local English-language press.

This was the background against which the Reserve System's most massive open market operation was conceived. Carl Snyder and I had been urging such an undertaking. Large purchases of Government securities would put money into the banks and enable them to lend more freely. The System bought less than my colleagues and I in the New York Bank advocated.

The amount that could be purchased at that time was limited by a technicality of the law. Under the then-existing terms of the Federal Reserve Act, the only legal collateral for Federal Reserve notes was gold, commercial paper, and promissory notes of member banks. So if purchases of Government securities had the result of reducing borrowing by member banks, there would be a shortage of cover for Federal Reserve notes. Thus, in the autumn of 1931 we found ourselves blocked from further substantial purchases of securities by this technicality.

By a curious set of circumstances, the way was opened to do something about this. Senator Carter Glass, the "father" of the Federal Reserve Act, was working on revisions of that Act to prevent the recurrence of such a boom and collapse as that of 1929. He had asked the help of Governor Harrison and of Eugene Meyer, Governor of the Federal Reserve Board. As a consequence, I had gone to Washington in January 1932, and was working over this problem with Dr. Emanuel Goldenweiser, Director, Division of Research and Statistics, and Walter Wyatt, the Board's General Counsel, and their staffs. We included, in our suggestions, amendments to the Federal Reserve Act which would make Government securities eligible in emergencies as collateral for Federal Reserve notes, and would thus remove the shackles which were at that moment tying the hands of the Reserve System. We also had drafted proposals for broadening the lending powers of the Reserve Banks.

In early February 1932, Governor Meyer and Ogden Mills, Secretary of the Treasury, who had been following our work, proposed lifting these sections out of the draft bill and putting them through Congress promptly to relieve the current desperate situation. They and Governor Harrison, with the support of President Hoover, persuaded Senator Glass to introduce the legislation, as the Glass-Steagall Bill. He did so with reluctance, saying to me in his Virginia drawl, "You tell George Harrison that I am now just a corn-tassel Greenbacker". The bill was passed by the end of February.

The Open Market Committee, now renamed Conference, then agreed on a program, and the System began purchases the first week of March, at a too modest rate of $25 million a week, but stepped it up to $100 million a week in April, and continued buying until early August. Total purchases amounted to $1 billion. This resulted in offsetting some further gold losses, and also in cutting indebtedness of member banks to the Reserve Banks to about half a billion dollars. It brought about a substantial easing in money conditions and money rates. There was again some difference of opinion: the New York Reserve Bank and the Board would have preferred to carry this program faster and further than most of the other Reserve Banks. From the point of view of hindsight, I believe larger purchases would have proved helpful.

In a sense, this massive purchase in 1932 concluded the preliminary stages of the development of open market operations as an instrument of policy. It marked the breaking away from certain limits in both the law and the conceptions governing these operations. In this first decade, the pattern had been set both in terms of freedom of movement, and in terms of the organization for the practice of unity of action in the Reserve System.

In the summer of 1932, there seemed reasonable hope that the corner had been turned in this great recession. There was an upturn in industrial production and some other indexes. But the full force of world-wide deflation was not yet spent, and the banking position was weak. The reasons why the bank crash came in the spring of 1933 constitute a separate and unhappy story, partly political.

The point that should be recognized here is that the evil forces at work in early 1933 were not ones that could be dealt with by open market operations. The Bank reserve position was comfortable, money rates were low, commercial paper under 2 per cent. The principal value of the Open Market Conference in this period was as a medium for the discussion of policy problems, which were many, rather than for open market action. The Conference did buy some $500 million of securities during the second half of 1933, but thereafter for many months the problem became one of dealing with excess reserves.

The Conference was involved during 1933 in an interesting chapter of Federal Reserve history having to do with the relation between the System and the Administration. But that is part of a separate and broader story. The important thing, from the point of view of our present subject, is that the Reserve System came through this difficult struggle with its integrity intact. The general pattern of decision-making and operations worked out by practical experience over the System's first decade provided a solid basis for making these operations the most flexible and pervasive tool of monetary policy in the United States.

SUMMARY

I suggest the following broad conclusions from the experience of the first decade of Federal Reserve open market policy.

1. Federal Reserve responsibility is not just the technical one of operating a complicated semiautomatic mechanism, but is more broadly the management of money in the public interest.

2. Open market operations have shown their great value in influencing the supply of money in relation to the country's volume of business.

3. Usually this influence is indirect and impersonal, but powerful. By controlling reserves, Federal Reserve action affects the money supply, and this action is reinforced by changes in the sentiment and behavior of lenders and borrowers.

4. This means that the Federal Reserve, while powerful, is one of many influences, and its action is more or less effective depending on circumstances, and on public reactions.

5. Through trial and error, the Reserve System has devised effective means of coordinating the views of twelve regional Reserve Banks and the Federal Reserve Board in the determination and execution of a unified System policy. Over the years the System has also gained greatly in knowledge and understanding of its function.

6. Whether this unique organization will have the wisdom and courage to deal promptly and effectively with possible future crises such as those of the late twenties and early thirties, will depend on the quality of its leadership and on the public understanding and support this leadership receives.