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The Prosperous Twenties, 1922–1929

The pleasant state of the economy in the 1920's created for the first time the vision of a state of affairs never before achieved in any part of the world—a condition where there would be well-paying jobs for all, where poverty would be abolished, where high productivity and enterprise would create a level of comfort and well-being which would extend throughout the mass of the population.

—Paul B. Trescott¹

The economy rebounded quickly from the 1920–1921 depression and entered a period of quite vigorous growth without general price inflation that lasted to the end of the decade. At the beginning of this period the Federal Reserve System became more fully aware of the monetary significance of its open market operations, and it developed a new rationale for the use of its control mechanisms. Equipped with better understanding of their powers and with fresh ideas as to their use, the central bankers applied their techniques in the optimistic environment of the Roaring Twenties and met with success. Monetary policy seemed able to guide the economy along a stable path. Compared with the bitter boom-and-bust experience of 1919–1921, and with the much longer and deeper miseries of the Great Depression to come, the twenties were halcyon days. Unfortunately, as the decade drew to its close the Fed was faced with the dilemma of either subduing stock speculation and thereby putting a clamp on credit in general, or trying to escort the economy along the path of steady progress, hoping that the flames of Wall Street would not envelop Main Street. Unable to meet the challenge, it vacillated, failed to prevent economic collapse, and soon thereafter found that much of the influence and kudos acquired during the twenties were gone.

A Major New Tool for the Fed's Kit

There can be no doubt, however, that most of the progress came from the discovery and development of a new policy implement: open-market operations in United States Government securities. Here at

last was an instrument almost perfectly adapted to the new philosophy of positive control. The Reserve Banks on their own initiative could now inject money into the market or withdraw money from the market at such times and in such amounts as they wished.²

In 1922 the Federal Reserve Banks began to carry out open-market operations for credit policy purposes. Previously they had been undertaken for the more mundane purposes of gaining income and providing collateral for Federal Reserve bank notes that were issued as replacements for national bank notes. In response to a sharp drop in their earnings as the volume of bank discounts declined in 1921, the reserve banks, acting individually, bought U.S. government securities. As they did, they competed with each other, on occasion causing unwelcome fluctuations in the government securities market. Much more important, it was realized that open-market purchases of securities by the reserve banks pumped reserve balances into the commercial banks and could be used as a major credit policy instrument. It was observed during 1922 and 1923 that when purchases (sales) were made on the open market, the volume of discounting fell (rose). In other words, the Federal Reserve Banks were causing changes in credit conditions as a side effect of their investment policies. This tendency of Federal Reserve holdings of securities and discounts to move in opposite directions in response to open market operations was dubbed the scissors effect. It dawned on the authorities that Section 14 of the Federal Reserve Act invested them with a major policy instrument; they actually held much greater power to control credit than they had thought!

Federal Reserve officials soon discovered, however, much to their amazement at first, that open-market purchases and sales brought about marked changes in money market conditions even though total earning assets of the Reserve Banks remained unchanged. When the Federal Reserve sold securities and extracted money from bank reserves, more banks were forced to borrow from the Reserve Banks, and those already borrowing were forced more deeply into debt. Since banks had to pay interest on their borrowings and did not like to remain continuously in debt, they tended to lend less liberally, which raised interest rates in the market. On the other hand, when the Federal Reserve injected money into bank reserves to pay for its purchases of government securities, banks were enabled to repay some of their debts to the Reserve Banks and because of this were willing to lend more freely.³

When the significance of open-market operations came to be appreciated, arrangements were made to carry them out in a coordinated manner by the several reserve banks. By law the Federal Reserve Banks could engage in open-market operations under rules set by the Federal Reserve Board. In

May 1922 a Committee on Centralized Execution of Purchases and Sales of Government Securities, consisting of four Federal Reserve Bank governors, was established by the Conference of Governors of the Federal Reserve Banks.⁴ Later that year it was expanded to five governors and authorized to make nonbinding recommendations to the reserve banks concerning open-market purchases and sales. The need for system-wide uniformity led to the creation in 1923 of the Federal Open Market Investment Committee by the Federal Reserve Board. This body replaced the earlier committee with the same membership, but it differed in being under the supervision of the Federal Reserve Board, and was assigned the task of recommending plans for open-market operations consistent with principles laid down by the board. In terms of the structure of the system, this development, by tending to concentrate open-market operations in the board, marks a decline in the policy-making powers of the reserve banks. Later in 1923 the board and the Federal Reserve Banks set up an open-market investment account, to be shared by the reserve banks on a pro rata basis, which could be increased or decreased by the committee with board approval. Yet the board did not have full control—individual reserve banks could still undertake open-market operations for their own accounts, and could opt out of proposed committee transactions. Although administratively awkward, this arrangement was used until further changes were adopted in the 1930s.

Another structural development occurred in June 1922 when the membership of the Federal Reserve Board was increased from seven to eight. Congress amended the Federal Reserve Act in this manner in response to pressures from farmers suffering from disastrously low prices for agricultural products. The additional board member to be appointed would represent the interests of agriculture.

Setting the Course

No other peacetime period in the history of the System has witnessed a faster development of both Federal Reserve thinking and policies than that starting around the end of 1921 and culminating in 1924. At the beginning of this period, Federal Reserve officials were confused and uncertain as to both ends and means. They were questioning old objectives and policy guides but had not yet developed new ones; they neither understood the instruments at their disposal nor were skilled in their use. By 1924 they had made almost incredible progress.⁵

The *Tenth Annual Report* (for 1923) of the Federal Reserve Board is celebrated for its high quality, particularly for its analytical discussion of credit policy.⁶ Now free from Treasury constraints, the Federal Reserve System set

about defining its role as an independent central bank. The report is concerned with the problem of what is necessary to maintain economic activity at a satisfactory level, and focuses on equilibrium between aggregate production and consumption. It points out that if credit is permitted to be used speculatively to accumulate excessive stocks of commodities, an imbalance will result that will lead to a recession. To avoid the danger of excessive credit creation, it is necessary to restrict Federal Reserve Bank credit to productive uses. The cyclical fluctuation of 1919–1921 led to the development of an inventory theory of business cycles that became merged with the familiar productive uses concept of the real bills theory. At this time the board was concerned about speculation in commodities rather than in securities; later, in the 1928 and 1929 annual reports, the alarm was raised over stock market speculation.

The experience of 1919–1921 was a vivid object lesson apropos of the danger of single-minded adherence to the real bills doctrine. Overinvestment in inventories during the immediate postwar boom was to a large extent financed by bank credit extended on the basis of real bills. The problem was that the bills drawn by businesses wishing to stockpile were no different in appearance from the “legitimate” ones. The fallacy of the real bills doctrine was exposed: extending credit on the basis of qualitative standards alone in accordance with the real bills doctrine was no guarantee against inflation from excessive credit creation. The *Tenth Annual Report* is explicit, even emphatic, in stating that the board was well aware of the importance of the quantity of credit as well as its quality or type. Eligibility requirements alone were not a sufficient basis for credit extension. In the *Tenth Annual Report* the board reiterated the view that credit should be restricted to productive uses, but it did not assert, as the real bills doctrine did, that real bills necessarily imply credit for productive purposes. There is something of a Cheshire cat effect here: the real bills doctrine as a policy guide had vanished, but the grin of relying on productive uses as a credit criterion remained. The idea that productive credit is self-regulating and safe from overexpansion is immaculate, but it had become clear that the real bills doctrine could not be relied on as a litmus test of productive uses, and therefore it failed to provide a policy guide. The position of the Federal Reserve Board was that the system should extend the right amount of productive credit while recognizing that adherence to the real bills doctrine did not automatically result in the right amount. As pointed out in chapter 1, the real bills doctrine was a widely held concept at the time the Federal Reserve Act was passed, and it provided a rationale for the credit-creating mechanism of rediscounting at the regional reserve banks at the time they were established. In terms of actual policy-making, however, the real bills doctrine was of very limited importance. As a result of the brief but painful lessons of 1919–1921, the real bills doctrine

was reexamined and, while vestiges of it remained, by 1923 it was not an important policy guide for the system.

The other prewar pillar of monetary policy, the gold standard, was also cracked and broken at this time, but it was thought capable of being restored to its former eminence. The *Tenth Annual Report* rejected the gold reserve ratio as its policy guide on the grounds that the international gold standard was not in operating order; controls and exchange regulations in many foreign countries kept it from serving as an automatic, self-correcting mechanism. The Federal Reserve Board was loyal to the gold standard ideal, however, and would do its part to help reinstate the international gold standard as an operational system. It was thought that when that had been accomplished, the Federal Reserve System would comply with the rules of the game, and then the gold reserve ratio would resume its place as policy guide. But that would take some time, and in the meantime it was necessary to devise a substitute policy guide. Still smarting from the severe economic fluctuations of 1919–1921, the Federal Reserve System now attempted “for perhaps the first time in monetary history, to use central-bank powers to promote internal economic stability as well as to preserve balance in international payments and to prevent and moderate strictly financial crises.”⁷ Here then is an important mutation of central banking policy. The central bank, unable to function (as intended) automatically as a mechanism for transmitting forces coming from the movement of gold, or from the productive needs of business, now began to exercise control over credit in the cause of stable economic conditions. The Federal Reserve System was finding a new niche for itself, and in the process fostered a new “economic world view” of great significance; the old laissez-faire doctrine gave ground to a new faith in the ability of government to provide stability to the economy. In the absence of a clear rule to follow (gold reserve ratio), the Fed decided to rely on its informed judgment. It would monitor economic activity as measured by current data on employment, production, inventories, and so on, and use its credit control instruments of open-market operations and discount policy to try to maintain the desired equilibrium between total production and consumption.

In the view of John Maynard Keynes, the time had come to adopt managed money permanently rather than return to the gold standard. In *A Tract on Monetary Reform* (1923), written in response to the severe inflations that followed World War I, he sought the best means of achieving a stable price level. He advocated vesting discretionary control over currency and credit in the central bank authorities in various countries, a policy with recently established beachheads in Britain and the United States.

Those who advocate the return to a gold standard do not always appreciate along what different lines our actual practice has been drifting. If we restore

the gold standard, are we to return also to the pre-war conceptions of bank rate, allowing the tides of gold to play what tricks they like with the internal price level, and abandoning the attempt to moderate the disastrous influence of the credit cycle on the stability of prices and employment? Or are we to continue and develop the experimental innovations of our present policy, ignoring the "bank ratio" and, if necessary, allowing unmoved a piling up of gold reserves far beyond our requirements or their depletion far below them?

In truth, the gold standard is already a barbarous relic. All of us, from the Governor of the Bank of England downwards, are now primarily interested in preserving the stability of business, prices, and employment, and are not likely, when the choice is forced on us, deliberately to sacrifice these to . . . outworn dogma. . . . Advocates of the ancient standard do not observe how remote it now is from the spirit and the requirements of the age. A regulated nonmetallic standard has slipped in unnoticed. *It exists.* Whilst the economists dozed, the academic dream of a hundred years, doffing its cap and gown, clad in paper rags, has crept into the real world.⁸

The Fed Wins Its Spurs

Although the System was originally conceived chiefly as a means of preventing banking panics and of providing an elastic currency, it came in the post-war period to be looked to . . . as an instrumentality for accomplishing business and price stability. The ability of the Federal Reserve System to determine or influence interest rates, to buy and sell government securities in the open market, and to deal in gold was frequently set forth as an influence which should go far toward mitigating or abolishing cycles of business boom and depression.

—Edwin G. Nourse⁹

After its strong recovery from the depression of 1921, the economy maintained a high and growing level of income until 1929, with the exception of two periods of gentle decline, hardly noticed by the general public, each lasting a little over a year. The first of the downturns ran from the spring of 1923 to the summer of 1924, and the second covered the period from the fall of 1926 to the fall of 1927. The Federal Reserve System used its monetary control powers to stabilize the economy, applying the brakes when expansion became overly vigorous and stepping on the accelerator when the economy lost momentum. The results were impressive: the two downturns were mild and fairly promptly reversed; the expansions did not become inflationary booms; the economy was prosperous, yet the gauge indicating the general level of prices showed only slight fluctuation. The experience gained by the central bankers from their on-the-job training seemed to be

paying off in relatively stable economic growth. As a result, monetary policy gained status as a mechanism able to keep the economy from veering off course; its practitioners experienced increasing self-confidence and were accorded new respect. The buoyant optimism of the twenties that accompanied the tangible changes—rapid growth of mass production industries, notably automobiles and household appliances; urban construction; the move to the suburbs—resulted in public confidence that as a nation we now knew how to keep the economic engine humming.

Let's take a brief closer look at what the Fed did that paid off so handsomely on the central bankers' bottom line of economic stability.

1. When the 1921–1923 recovery threatened to become too rapid early in 1923, government securities were sold and the discount rate was raised. The resulting drop in Federal Reserve credit neutralized or “sterilized” most of the gold that flowed in during 1923–1924, and the growth of the money stock was checked. The economy stopped growing and entered a period of mild recession.

2. The recession of 1923–1924 was counteracted by substantial purchases of government securities and a series of discount rate cuts. The economy promptly recovered. A supplementary motive was to assist the return of European nations to the gold standard; greater availability of dollars tended to strengthen European currencies and so curb the inflow of gold to the United States.

3. During the expansion from mid–1924 to the fall of 1926 there was a real estate boom; the stock market set out into the foothills of the peaks to be reached in 1928 and 1929. The Fed applied its credit brakes gently in 1926, and the economy slowed.

4. The slight recession of 1926–1927 was met by expansionary credit policies as in 1923–1924, and again the economy recovered. At this juncture international considerations became very important. As discussed below, the decision to ease credit in 1927 became a focal point of sharp criticism.

The six years of gentle undulation of the economy from 1922 through 1927 mark one of the most placid and satisfying periods of monetary policy in the life of the Federal Reserve System. Before taking up the divisive and frustrating final two years of the decade, there are some other features of the twenties to consider.

Pride of place belonged to the objective of economic stability, but the Federal Reserve had other goals as well. It was of course intended that the international gold standard be restored, so the monetary authorities sought to use their powers to promote its restoration and to maintain balance in America's international payments. But whereas the Federal Reserve System very clearly stated that it gave great weight to gold standard restoration, it neglected to explain how this was to be achieved. The Fed wanted both internal economic stability and the gold standard link to the external (world)

economy; it was quite willing to expatiate on how to achieve the first, but its lips were sealed concerning the second objective. There is a self-protective aspect inherent in this behavior in that the two goals might require conflicting policies and pose a difficult choice that would be exposed for all to see. It has been plausibly argued that despite the dual objectives the system based its policies primarily on domestic considerations. Whenever the foreign-oriented objectives could also be served by the same policies, they would be brought in to make an even stronger case. If external objectives required different policies they were put on hold. Another aspect of this issue involves the locus of decision-making power within the system. The international policies were largely the province of the Federal Reserve Bank of New York under Governor Benjamin Strong, of whom more will shortly be said, rather than under the control of the Federal Reserve Board in Washington.

The decision to ease credit conditions in 1927 provides a classic illustration of a strategic and controversial monetary policy decision. The actions taken were not dramatic, but they came to be viewed as feeding the fires of speculation in the stock market and, to many, contributing to the depression that followed.

In July 1927 Governor Strong arranged a conference, or in today's journalistic parlance a "financial summit," in New York with Governor Montagu Norman of the Bank of England, Governor Hjalmar Horace Greely Schacht of the Reichsbank, and Deputy Governor Charles Rist of the Bank of France. It was an effort by Strong to bring about cooperation among the world's preeminent central bankers. J.K. Galbraith has noted the gingerly manner in which these financial Titans gathered:

On July 1, 1927, the *Mauretania* arrived in New York with two notable passengers, Montagu Norman, Governor of the Bank of England, and Hjalmar Schacht, the head of the Reichsbank. . . . The secrecy covering the visit was extreme. . . . The names of neither of the great bankers appeared on the passenger list. Neither, on arriving, met with the press, although, according to the *New York Times*, Dr. Schacht, on emerging from the dining room on the way in from quarantine, "paused long enough to announce that he had nothing to say." Sir Montagu hurried upstairs, waving his hand, and was altogether less cooperative.¹⁰

Benjamin M. Anderson's account of the meeting almost suggests a conspiracy:

The conference was, indeed, meant to be very secret. Gates W. McGarrah, chairman of the Board of Directors and Federal Reserve agent of the Federal Reserve Bank of New York, had asserted his right to be present at the conference; but Governor Strong refused, and McGarrah, instead of fight-

ing, left the city. The whereabouts of the members of the conference was kept secret from the banking community of New York.¹¹

The governors of the Federal Reserve Banks who were on the Open Market Investment Committee were invited to the formal sessions of the international group by Strong, but he went behind the backs of almost all of the members of the Federal Reserve Board, inviting only Governor Crissinger of that body.

After the exchange of views in New York, the significant subsequent development was an easier money policy by the Federal Reserve System during the second half of 1927; the discount rates were reduced at the reserve banks and large securities purchases were made on the open market. When Strong went to Washington he gained the approval of the Federal Reserve Board for his easier money policy proposals. According to Anderson, "Norman and Strong forced through their programs of cheap money in the United States" because the Federal Reserve Board was "rather supine" except for Adolph Miller, who was overmatched by Strong and Norman.¹² The board justified its action as an aid to economic recovery and as assistance to foreign countries, both to finance their purchases of U.S. crops and to help their foreign exchange positions. After the board sanctioned the policy, the various Federal Reserve Banks lowered their discount rates according to Hoyle, except for the Federal Reserve Bank of Chicago, which refused to budge. The Federal Reserve Board held a special meeting and voted four to three to end dissension in the ranks by forcing the Chicago Fed to cut its rate. By successfully asserting its authority to control discount rates (although in a formal sense the reserve banks set them), the board extended its power over the monetary control mechanism. Three years earlier, it will be recalled, the board assumed the primary role in determining open-market operations.

While it is true that the easier money policy was justified on the dual grounds of encouraging domestic economic recovery and supporting the international gold standard, there is little doubt that under the circumstances the gold standard criterion was foremost at the time. Great Britain had returned to the gold standard in April 1925 at its prewar value of sterling and was struggling to maintain an adequate gold stock. France was preparing to return to the gold standard. The United States had experienced a gold inflow earlier in the 1920s and had been absorbing gold rapidly from abroad during 1927. A cheaper money policy in the United States would tend to return gold to Europe, or at least keep Europe from losing more gold, and therefore would make an important contribution toward restoring the gold standard mechanism. In doing this, the United States was not acting in compliance with the rules of the gold standard, but was acting to reestablish the gold standard. The chief mover in all this was Benjamin Strong, who took

very seriously the responsibility that he felt for reestablishing the gold standard. Strong was the Jim Thorpe of central banking: he grabbed the ball and headed for the gold standard goal with deft footwork and determination.

If the easy money policy was good for the gold standard, helpful to domestic economic recovery generally, and in the view of many would stimulate demand for American farm products, why did Adolph Miller and Benjamin Anderson lead an attack on it? It was recognized that cheap money could stimulate credit expansion that was already fueling stock market speculation. Despite the sluggish behavior of the economy, the stock market advanced steadily throughout 1927. Member commercial banks expanded their security loans and added to their security investments, while commercial loans were essentially flat. We thus return to the view that credit expansion is dangerous if it is used for speculation rather than production. If money creation is not for productive purposes, then monetary policy fails the qualitative test that was the part of the real bills doctrine worth preserving.

There is an interesting sequence of observations by prominent writers on the importance of the Fed's easy money policy for the subsequent stock market speculative boom and collapse. In *The Great Crash* (1935), Galbraith took the view that to blame the Federal Reserve "assumes that people will always speculate if only they can get the money," which is not true. In *A Monetary History of the United States 1867-1960* (1963), Friedman and Schwartz retort that the Federal Reserve could have broken the bull market by clamping down on money creation. In *Money* (1975), Galbraith accepts the point that the Fed can be held responsible for failing to stop the stock market boom even if it didn't cause it, but he also stresses the point that if credit had been made generally tighter, then the economy would very likely have suffered from the curbing of loans for commerce, industry, agriculture, and housing. To get the stock market on a satisfactory monetary diet might have required starvation of the economy as a whole.¹³

How did the monetary aggregates behave during the twenties? For the four years from December 1921 to December 1925 the money stock rose by 26 percent as a result of surges during the upswings of 1921-1923 and 1924-1926. Over the next four years, December 1925 to December 1929, the money stock hovered at about the same level, with only a 1.5 percent increase for the period. The monetary base from 1923 onward was held quite steady as a result of Federal Reserve management, despite a rise in the gold stock from \$3 billion in mid-1921 to \$4.2 billion in 1924 and a drop from \$4.3 billion in mid-1927 to \$3.8 billion in mid-1928. Gold movements in and out of the country were prevented by approximately offsetting increases and decreases in Federal Reserve credit from causing much change in the monetary base. By deliberately isolating the monetary base (and by extension the money stock, price level, production, and so forth) from the effects of the gold flows by using open-market operations and discount pol-

icy (a practice known as the sterilization of gold), the Federal Reserve System was able to protect the domestic economy from undesired external trends and shocks. Initially the gold sterilization policy was viewed as appropriate to the special conditions of the postwar period when the international gold standard was in the process of rehabilitation. But as countries returned to gold, in particular after Great Britain returned to the fold in 1925, this justification atrophied. The objective of maintaining stable internal economic conditions for the nation through monetary policy was an idea whose time had clearly come. Economic stabilization was indeed the desideratum, but unfortunately it came directly into conflict with maintenance of the gold standard. The essence of the international gold standard is the willingness of nations to permit the monetary, price, and income changes that follow from inflows and outflows of gold. To sterilize gold flows was to prevent the automatic process of the gold standard system from operating. In other words, sterilization subverted the gold standard. If some countries sterilized but not others, the burden of adjustment would fall entirely on the latter. If the United States, for example, sterilized gold inflows, then the gold-losing countries would have to bear the brunt of the adjustment by a deflationary spiral. The conflict between national economic stabilization and adherence to the gold standard posed a fundamental problem, and the failure to face up to this problem, much less resolve it satisfactorily, is probably the most important monetary issue to emerge in the interwar era.

Important changes occurred in the American commercial banking sector during the twenties. The composition of bank loans shifted toward security and real estate loans and away from commercial loans, which had traditionally been predominant. Business firms found themselves better able than in the past to obtain funds for expansion through the sale of securities and by ploughing back the ample profits brought by prosperity. The new practice of buying on the installment plan, typical of financing automobiles and other big-ticket consumer goods, was carried out through finance companies that borrowed from the banks.

A major development of commercial bank operation was the increased role of investments relative to loans. The banks bought securities issued by federal, state, and local governments, but they did not stop with such "safe" investments; they acquired the securities of domestic corporations and foreign debtors. Banks in large cities created companies known as affiliates for dealing in securities, both stocks and bonds, new issues of which they underwrote and distributed, and in which they would speculate by purchases for their own account. National banks, under the provisions of the Federal Reserve Act, were permitted to carry out trust functions. Securities handled by bank affiliates might easily come to rest in trust accounts administered by the parent bank.

The large commercial banking institutions were at the center of distri-

bution of vast amounts of foreign securities, many of dubious worth. Here was an innovation whose time had suddenly come and would even more suddenly go. Selling securities was a highly lucrative activity, so much so that competition among investment bankers and the investment affiliates of major banks took the form of searching out potential issuers of stocks or bonds. The intensity of the bankers in this scramble for "deals" suggests the spirit of the Oklahoma land rush but in pursuit of intangible rather than real wealth.

One sort of security which it was very easy to sell was the bonds of foreign states, and here the strenuousness of the competition approached the ridiculous. Young men representing big New York banks camped in Balkan and South American capitals in the frantic hope of inducing the local financial dignitaries to issue bonds. Sometimes these young men were not only ignorant of the language of the country but of its customs and traditions, and even of its political and financial record; and there might be three or four of them maneuvering for a single bond issue, each eager to get ahead of the others by whatever means could be contrived. Small wonder, under the circumstances, that some of this headlong financing did not redound to the credit of the banks which made the loans and sold the bonds, or that it led in due course to the shrinkage of assets of hundreds of American banks and to the impoverishment of thousands of embittered investors.¹⁴

In the euphoric atmosphere of the time, the regulation of bank activities was relaxed in various ways, a process later much regretted.

Historically, as the country grew, the number of commercial banks increased until peaking at almost 30,000 in 1921. Throughout the twenties, however, despite the expansion of the economy, the number of banks declined year after year to about 24,000 at the end of 1929. This reversal of form involving the disappearance, by failure or merger, of almost 6,000 banks was not nearly as important as the sheer numbers might suggest; it was not the result of financial panic or a breakdown in either the real economy or the banking structure. The vast majority of banks that ceased to exist were very small fish in very small ponds; they had capital of \$25,000 or less and were located in prairie towns. They were pushed into oblivion by forces beyond their control: agriculture suffered chronic overproduction; developments in transportation favored the larger urban centers at the expense of the small towns with their small local banks. In short, environmental changes deprived numerous small banks of their reason for existence; they could not survive, for their place in the scheme of things had gone.

The Fork in the Road

The dispute between the Board and the New York Bank largely paralyzed monetary policy during almost the whole of the important year

1929. In addition, it was probably the crucial engagement in the struggle for power within the system.

—Milton Friedman and Anna Schwartz¹⁵

As the year 1928 opened, President Coolidge, after conferring with Treasury officials, announced that “he was satisfied that there was nothing alarming about the speculative activity in the stock market.”¹⁶ Evidently he thought it desirable to be reassuring. His decision not to run for a second term might suggest that he had second thoughts or a premonition that all was not well, but when he left office in March 1929 he still maintained that prosperity was secure. In June 1929 Bernard Baruch, a well-known financier and perennial adviser to presidents, observed that “the economic condition of the world seems on the verge of a great forward movement.” In October 1929 Irving Fisher, never confined to an ivory tower, viewed stock prices as having “reached what looks like a permanently high plateau.”¹⁷ These public figures were among the most prominent of many who spoke “bullishly” of the future on the eve of the stock market crash. It would be understandable if later they wished they had followed the advice attributed to movie mogul Samuel Goldwyn: “Never prophesy, especially about the future.” Paul M. Warburg was among the relatively few who understood the precarious reality of the situation and said so publicly. In March 1929 he observed that the power to control events had “passed into the hands of stock-exchange operators, who have now for many months governed the flow of money.” and added that “speculative overexpansion invariably ends in overcontraction and distress.”¹⁸ The chief architect of the Federal Reserve System and member of the Federal Reserve Board from 1914 to 1918 found it necessary to fault the system for failing to exercise the necessary leadership.

It was not that the Federal Reserve System was unaware of the danger or unwilling to act; it tried but failed to cope with the problem. In addition to the goals of maintaining stability in the national economy and restoring the international gold standard, a third policy criterion of the Federal Reserve System was the control of speculation. Whereas in 1920–1921 the problem was speculation in commodities, attention in the late twenties was of course on securities; in 1928–1929 stock market speculation became the system’s dominant concern. The day after Coolidge said there was nothing to be alarmed about, the Federal Reserve Board was advised by its research director, E.A. Goldenweiser, that the situation was grave. In mid-January 1928 the Open Market Investment Committee even changed its meeting place from New York to Washington, lest its presence in the financial center be too unsettling to the financial markets. Common stock prices had risen throughout 1927 and continued to rise, fed by large flows of money into brokers’ loans, the chief source of financing of stock purchases on margin. The monthly index of common stock prices (1926 = 100) stood at 134 in

January 1928, on its way to 171 by December and a peak of 225 in September 1929. The Dow-Jones industrials average went from 200 in January 1928 to 300 by December and peaked at 381 in September 1929.

The system adopted a restrictive policy early in 1928, selling securities and raising the discount rate in three steps to 5 percent by July. A policy of steady restraint was continued until the fall of 1929 with the intention of bringing speculation on the stock market under control without bringing on a recession or depression. The monetary aggregates held quite steady: the money stock and the monetary base fluctuated only slightly. The wholesale price level declined somewhat from late 1928 through 1929, resulting in "the first cyclical expansion since 1891-93 during which wholesale prices failed to rise."¹⁹ The stock market rise was fueled by money flooding in to brokers who financed the purchase of stock by speculators large and small as the puritan ethic lost ground to the get-rich-quick mania. The banks of course were lenders to brokers on call loans which had increased substantially since 1921, but during 1928-1929 the amount of money loaned *by banks* did not provide additional funds to finance the stock market boom. The money, while often channeled through the banks, came from sources outside the banks, from corporations and individuals, and from outside the country, as Wall Street acted as a powerful money magnet. With interest rates on brokers' loans running as high as 12 percent with a high degree of safety, since the loans were collateralized by securities and could be called by the lender, and with the nominal interest equal to real interest as prices of goods and services were stable, the attraction is understandable. Between January 1, 1928, and October 4, 1929, the total amount of brokers' loans nearly doubled; loans by banks decreased, while loans by "others" increased by 263 percent and provided over 75 percent of total brokers' loans at their highest level.

The problem of how to arrest security speculation led to a dispute between the Federal Reserve Board and the Federal Reserve Bank of New York. The board took the position that to curtail speculation by open-market and discount policies ran the risk of severely cutting off funds for productive purposes. Therefore the board favored a selective credit control policy referred to as "direct pressure," under which member banks making loans on securities would lose their rediscounting privileges. The reserve banks rejected this approach and advocated reliance chiefly on higher discount rates. The Federal Reserve Bank of New York tried repeatedly to raise the discount rate above the 5 percent level adopted in May 1928 but did not gain board approval until August 1929, when the rate went to 6 percent (still below the 7 percent of 1920-1921) for about three months before descending again. Although this conflict within the system had appeared on earlier occasions, it now became something of a cause célèbre. Benjamin Strong at the Federal Reserve Bank of New York resisted the dominance of the board, but

after the untimely death of this very influential figure in October 1928, the power within the system passed almost completely to the board, the culmination of a trend noted earlier with respect to open-market operations and discount rates. A statement by the board in February 1929 called attention to the large amount of credit going into security loans and pressed a policy of moral suasion on the member banks by advising that they should not expect rediscount facilities at the Federal Reserve Banks if they were borrowing to make or maintain speculative loans. Of course, this policy could not intercept the torrent of funds from "outside" sources going into the stock market.

The Federal Reserve Board tried to find a judicious combination of policies which would check stock market speculation before it got completely out of hand and yet provide enough credit to keep output and employment at high levels. It failed to achieve either goal. A clear slowdown in economic activity began some months before the stock market began to slip early in October 1929. Some critics of the Federal Reserve System consider the discount rate reduction of August 1927 as the event which signaled loss of control over stock market speculation. The case is also made that if the Fed had acted more forcefully in 1928 to control credit, it could even then have prevented the stock market debacle. It is important to remember, however, that the system had other important domestic and international objectives. A restrictive policy in 1927 was not consistent with those objectives, and a considerably more restrictive policy in 1928 and 1929 could hardly have failed to result in economic contraction. The lesson drawn a few years later was that the stock market speculation could not adequately be controlled with general credit control powers alone. As a result, the Federal Reserve Board acquired new selective control authority, a development described in chapter 4.

The Strong Man of the Fed

Not the least of our debts to Ben Strong is for his example of monetary statemanship. Rare indeed are leaders of his ability, enterprise, personal force, courage, integrity, and utter devotion to the public interest.

—Lester V. Chandler²⁰

Benjamin Strong came to central banking from a trust company background in New York City. He played a significant part in J.P. Morgan's banking rescue efforts during the Panic of 1907, as a result of which he gained stature in financial circles and became an advocate of reform of the nation's banking

structure. He left the presidency of Bankers Trust Company to head the Federal Reserve Bank of New York at its inception in 1914.

In his capacity as a reserve bank governor for fourteen years until his death in October 1928, Benjamin Strong was the dominant figure influencing American monetary and banking policies, and he also played a leading role in international finance. Strong's frequently controversial policies earned high praise and some harsh criticism; that he exercised leadership within the Federal Reserve System and in the banking community generally is unquestioned. He did so despite repeated periods of poor health which required lengthy leaves of absence.

During his tenure as governor of the Federal Reserve Bank of New York, Strong was involved in numerous internal system conflicts. Struggles for power within a bureaucracy are no novelty, of course, but in the case of the Federal Reserve System they were built into the organization by the fact that the Federal Reserve Act was worded in quite general terms in order to secure its passage. The result was that the officials of the system had to settle controversial issues and provide specific meaning to general concepts. One basic question to be resolved was the division of authority between the Federal Reserve Board in Washington and the Federal Reserve Banks. If the powers of the board were broadly interpreted, there would be centralization of authority in the hands of presidential appointees. On the other hand, the board might be construed as possessing only limited powers of a supervisory and regulatory nature, with the reserve banks, controlled by bankers, having the active operational role. Strong became the leader of the officers and directors of the regional banks with the objective of unifying their practices into a cohesive system and preserving their decision-making initiatives, while simultaneously resisting the concentration of control in the Federal Reserve Board. Below the surface there was a continuation of the old conflict between public (political) and banking (Wall Street) interests and attitudes.

As discussed earlier, the Federal Reserve cooperated fully with the Treasury during World War I, chiefly by lending to banks and by serving as fiscal agent. By demonstrating competence and usefulness, the system gained acceptance. Shortly after the war, in 1919, the Treasury and Federal Reserve split over monetary policy as the Fed pressed for higher interest rates before the Treasury was ready for them. At this time Strong, almost alone within the system, struggled to free it from the dominating influence of the Treasury. After the inflationary boom of 1919-1920 turned into the depression of 1920-1921, the Federal Reserve was severely criticized for allowing both to occur. When the congressional Joint Commission of Agricultural Inquiry investigated banking and monetary policy in 1921, Strong defended Federal Reserve policies in three days of testimony in which he presented an impressively cogent explanation of system operations and policies. One point of his testimony is of particular interest in terms of the development of

monetary policy. Strong defended the maintenance of high discount rates during much of the deflationary period by pointing out that the reserve banks were ready lenders and had prevented a financial crisis. Since the Federal Reserve System had been established chiefly to prevent a recurrence of panic, and in its absence one would very likely have occurred, this was a cardinal point. In 1920–1921 the Federal Reserve Banks were much concerned about their falling reserve ratios which seemed to require a restrictive monetary posture. Again, the central bankers were still at this time influenced by the prewar view that their proper *modus operandi* was passive accommodation, not control.

Yet it seems anomalous that the Fed persisted in a restrictive policy at a time when the economy was in the throes of contraction. Such a deflationary monetary policy soon came to be considered inexplicable and perverse as monetary policy developed into a positive instrument for promoting high levels of output and economic growth. The experience of 1920–1921 contributed to changed attitudes shortly thereafter. Only three years later, in 1924, when a mild recession developed, Strong pursued a countercyclical policy of expanding Federal Reserve credit through open-market purchases of securities and reduced discount rates. As the economy moved away from the primary post–World War I depression period into the new era of prosperity beginning in 1922, there was a pronounced change in thinking about monetary policy. The Federal Reserve's policies of 1919–1921 look less culpable from the older perspective than when judged by the later concepts of monetary policy.²¹

Governor Strong questioned the validity of the real bills doctrine or commercial loan theory of banking as a guide to policy. He made the case for quantitative control of the money stock in place of the automatic qualitative rule in a lecture at Harvard in November 1922 which blended banking experience with monetary theory. Since the real bills doctrine has had a pervasive influence in American monetary history, a fairly extended quotation from this illuminating talk seems appropriate.

Now as to the limitations which the Federal Reserve Act seeks to impose as to the character of paper which a Reserve Bank may discount. When a member bank's reserve balance is impaired, it borrows to make it good, and it is quite impossible to determine to what particular purpose the money so borrowed may have been applied. It is simply the net reserve deficiency caused by a great mass of transactions. The borrowing member bank selects the paper which it brings to the Reserve Bank for discount not with regard to the rate which it bears, but with regard to various elements of convenience—that is, the denomination of the paper, its maturity, whether it is in form to be easily and inexpensively delivered physically to the Reserve Bank or not—and it makes little difference to the borrowing bank what transactions may have caused the impairment of its reserve, because the

paper which it discounts with the Reserve Bank may have no relation whatever to the impairment that has arisen. To specify more exactly—because this is an important point—suppose a member bank's reserve became impaired solely because on a given day it had made a number of loans on the stock exchange; it might then come to us with commercial paper which it had discounted two months before and which had no relation whatever to the transactions of the day; and with the proceeds of the discount make good the impairment. If it was the design of the authors of the Federal Reserve Act to prevent these funds so advanced by Federal Reserve Banks from being loaned on the Stock Exchange or to non-member state banks or in any other type of ineligible loan, there would be only one way to prevent the funds being so used, and that is by preventing the member banks from making any ineligible loans whatsoever, or deny it loans if it had. . . .

The eligible paper we discount is simply the vehicle through which the credit of the Reserve System is conveyed to the members. But the definition of eligibility does not affect the slightest control over the use to which the proceeds are applied.²²

Strong became an advocate of price level stability as a major objective by 1922, but he argued forcefully against the adoption of a law which would order the Federal Reserve to stabilize prices. He maintained that such legislation would raise hopes which could not be met. By controlling credit, the Federal Reserve System could certainly influence prices, but other forces outside the control of the central bank could also affect prices. Directing the system to stabilize prices assumed that it had greater power than it actually possessed; there were other important objectives as well, so it would be inappropriate to force the central bank to concentrate on one alone.

From 1924 to 1928 Strong was much concerned with reconstructing the international monetary system and bringing about cooperation among the leading central banks. While the famous easy money policy of 1927 was a system policy, it was conceived and initiated by Strong. Benjamin Anderson contended that Strong's policies expanded the money supply too rapidly after 1924 and especially in 1927, and he was quite biting in his evaluation of Strong as a central banker.²³

By 1928 the desire to restrict credit to combat stock market speculation came into serious conflict with the system's broader objectives. While Strong wanted to dampen stock speculation, he believed that the system should be concerned more with the level of total economic activity than with particular economic sectors. He rejected "direct controls" designed to cut off bank lending for stock purchases. They would not have applied to nonbank lenders and would have directly affected only banks that were borrowers from the Fed. The direct controls under discussion in the late twenties were quite different from the margin requirements introduced in 1934; the latter apply to borrowers as well as lenders and are not limited to loans from banks.

Galbraith has suggested that the Federal Reserve could have asked Congress for power to set margin requirements. As noted in chapter 2, a voluntary arrangement to control stock exchange lending was utilized briefly at the end of World War I, so the idea had surfaced earlier. But however desirable, it was probably too radical a concept to be given serious consideration during peacetime in 1928–1929.

The five original appointive members of the Federal Reserve Board were men of high caliber. Two came from careers in banking, Paul M. Warburg and William P.G. Harding. Warburg, whose contributions to the formation of the Federal Reserve System were described in chapter 1, was certainly a potential leader, but his German origin led to his departure from the board in 1918. Harding, an Alabama commercial banker until his appointment to the board, served very ably as governor for six years but was not reappointed when his term expired. One academic economist, Adolph C. Miller, provided the board with a broad view of the effects of Federal Reserve activity on the economy as a whole. Charles Hamlin, a lawyer and former assistant secretary of the Treasury, and Frederick A. Delano, a former railroad executive, were the other two initial appointees.

In 1922 President Warren Harding replaced Governor Harding with Daniel R. Crissinger, of whom it was said that his only qualification was that he was Warren Harding's personal friend from Marion, Ohio. This blatantly political appointment over the protest of Secretary of the Treasury Andrew Mellon, among others, "broke the heart and courage of the Federal Reserve Board."²⁴ There were other appointments of men in the twenties whose qualifications for the board were very questionable. Not all evaluations of the board at this time are as sharp as Galbraith's observation that "the Federal Reserve Board in those times was a body of startling incompetence," but they are hardly flattering. Benjamin Strong, on the other hand, is widely seen as the most important American central banker since Nicholas Biddle, who headed the Second Bank of the United States a century earlier.²⁵ Miller and Hamlin served very ably but did not have leadership ability; with the removal of Governor Harding from the board, there was no challenge to Benjamin Strong's leadership of the system, although he was governor of the Federal Reserve Bank of New York and not a member of the Federal Reserve Board in Washington. In 1927 Crissinger resigned and was succeeded by a much better qualified person, Roy A. Young, as governor of the board.