



The United States Financial Crisis of 1931

On September 21, 1931, Great Britain abandoned the gold standard it had so arduously restored in 1925. The decision capped a long summer of European financial crises. In rapid succession, Austrian, Hungarian, and German banks had lost deposits from foreign and domestic lenders and each nation had resorted to tight controls over foreign exchange and gold movements. During the summer of 1931, British authorities spent \$1 billion supporting the value of the pound sterling at the high level it had been given six years earlier. By the end of the summer, it was clear that this effort had failed.

Following Britain's departure from gold, a traumatized world financial community quickly focused its anxieties on the situation in the United States. Foreign holders of dollar deposits in American banks began to doubt that their deposits' value was secure. After all, those who had trusted in the pound sterling as a store of wealth had been dealt a heavy blow on September 21. European investors, businessmen and central bankers who had dollar deposits in the United States and investments in liquid American assets (mostly short-term bankers' acceptances) sought to convert these assets into gold, anticipating an American crisis. This constituted an "external drain" on the American banking system, since the gold that foreigners obtained had been part of the U.S. banking system's reserves. At the same time, American depositors worried about the status of their bank accounts as well. Bank failures in the first eight months of 1931 had totaled 933; together, these banks had deposits of \$640.4 million. In the absence of deposit insurance, bank failures frequently meant devastating losses for depositors. Therefore, as foreigners turn their deposits into gold, Americans who anticipated a possible bank failure converted their own deposits into currency at a rapid rate. This leakage, or "internal drain" from the banking system, also contracted the money supply.

In the weeks following the British abandonment of gold, the internal and external drains became immense. On September 22 alone, \$116 million of gold was lost. Between September 31 and October 28, gold outflows amounted to \$727 million, over 15% of the nation's gold stock. The internal drain resulted in an additional \$393 million in currency in circulation during the same period. Banks felt the strain; failures reached 305 in September and rose to 522 in October, an average of about 25 each business day. The money supply now shrank more rapidly than in the previous two years of depression. In the second half of 1931, money narrowly defined (demand deposits in commercial banks plus currency in the public's hands) fell by \$1.7 billion, compared with a decline of \$2.7 billion in the previous two years. The broader money supply measure (including time deposits at commercial banks) fell \$4.9 billion (12%) in the second half of 1931. Between mid-1929 and mid-1931 it had declined only \$3.6 billion.

Research Associate Daniel Pope prepared this case under the supervision of Assistant Professor Michael G. Rukstad as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

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The Federal Reserve System: Structure and History

The U.S. central bank—called the Federal Reserve System—bore the responsibility of responding to the financial crisis of the fall of 1931. The tools at its disposal and the ways in which it employed them had been fashioned by both theory and experience. To understand the Fed's actions in the crisis, we must look at its background.

Establishment of the Federal Reserve System in 1914 ended a period of more than three quarters of a century during which the United States had no central bank. Fear of concentrated power pervaded the new plan as well. The Fed's real business was to be conducted by a dozen Federal Reserve Banks, located in major cities across the country. The Federal Reserve Board in Washington had limited and somewhat unclear powers. The Fed's dispersed power was unique; European central banks concentrated authority in one place. By the time of the Great Depression, the secretary of the treasury and the comptroller of the currency sat on the board *ex officio*; the President of the United States named six others, one of whom was required to represent the interests of agriculture. No more than one board member could come from any single Federal Reserve District. Even after nearly two decades of operations, the locus of responsibility within the Fed was unclear in 1931, and the Fed's relationship with the President and Treasury Department was also ambiguous.

The uncertain power relationships within the system manifested themselves in each of the ways that the Fed controlled money and credit.* Since its inception, the Fed's main tool had been the discount rate it charged for loans to member banks. These loans were secured by short-term commercial loans the member banks had made. Bank assets which could be discounted with the Fed were called "eligible paper." Each Federal Reserve Bank set its own discount rate. Although it had been established that the Federal Reserve Board could overrule a bank's discount rate change and could impose another rate in its place, the board's power to initiate discount rate changes on its own had not been fully tested and had met with vigorous opposition when the board had ordered a rate change for the Federal Reserve Bank of Chicago in 1927.

In addition to discounting eligible commercial paper, the Federal Reserve Banks also provided funds to commercial banks by purchasing bankers' acceptances. These were types of short-term loans, used primarily in financing international trade, which had been guaranteed by a bank. In practice, the Federal Reserve Bank of New York purchased the vast majority of acceptances. The board could approve or disapprove the New York Fed's proposed minimum acceptance rate (the discount rate it charged banks for buying their acceptances), but New York could charge higher rates than the minimum in their actual purchases. Some board members worried that the New York Fed had gained too much power over credit conditions by its ability to set acceptance rates, but the New York Fed replied that its knowledge of market conditions and the need for rapid responses to new circumstances made it essential that they have this power. Since the 1930s, buying bills of acceptance has ceased to be a significant aspect of Federal Reserve money and credit control.

The final policy instrument of the Fed, open market operations in U.S. government securities, was more controversial than the other two. The 1914 Act had allowed each Reserve Bank to purchase these securities "in accordance with the rules and regulations prescribed by the Federal Reserve Board." This apparently consigned the board to a merely advisory role. These open market operations began haphazardly in 1922 when several Reserve banks purchased substantial quantities of government securities, in large measure as a way to gain interest-earning assets. The next year, the Federal Reserve Board, eager to coordinate these purchases, set up an Open Market Investment

* One method the Fed uses (infrequently) today to control the money supply was unavailable to it before 1933. Today, it can adjust the reserve requirements for member banks, but in its earlier years reserve requirements were set by law and the Fed could not alter them. Indeed, requirements remained constant from 1917 through 1933.

Committee (OMIC). The governors of the Federal Reserve Banks of Boston, New York, Philadelphia, Chicago and Cleveland sat on the OMIC and dealt in securities for a systemwide open market investment account. Benjamin Strong, governor of the New York Fed, dominated the OMIC until his death in 1928. The Federal Reserve Board set guidelines for open market operations and had the right to disapprove of the committee's plans, but the Open Market Investment Committee asserted its rights to buy and sell without detailed interference from the board. In 1930, however, the OMIC's membership was broadened to include the governors of all 12 Reserve banks. It was renamed the Open Market Policy Conference (OMPC).^{*} The reorganization diluted the influence of the New York Fed, which had been the most consistent exponent of open market operations.

Of these methods of altering bank reserves, only open market operations in government securities were fully discretionary for the Fed. Member bank borrowing by discounting eligible paper depended on commercial bankers' decisions about their own portfolios. Presumably a lower discount rate would induce such borrowing and a higher rate would retard it, but the quantity of discounts was up to the member banks who borrowed. The case was much the same for buying bills of acceptance. Normally the New York Fed set acceptance rates and then bought all the bills it was offered at those rates. Rarely did it sell acceptances; it simply let these short-term assets "run off" when they came due. These instruments therefore were passive, as opposed to open market operations in government securities, where the Fed itself decided how much to buy or sell on the open market. Yet, as we shall see, open market operations remained, as it were, under a cloud because of the prevailing banking theory of the era.

Since the structure of the Federal Reserve System was permeated with ambiguity, it is not surprising that leaders of the system sometimes distrusted one another and guarded their authority with great care. For example, Federal Reserve Board member Charles S. Hamlin, a Bostonian whose government service dated back to the Cleveland administration, resented the board's governor, Eugene Meyer, who "seems to regard the board [members] as subordinates and not as equals." Hamlin feared that Meyer was too close to President Hoover and Treasury Secretary Ogden Mills on the one hand, and the New York Fed on the other.¹ Meyer in turn told Hamlin that "He was tired of the constant 'yapping' against the Federal Reserve Bank of New York." However, Meyer too was angered by the New York Fed's independence and by the tight relationship between George S. Harrison, governor of the New York Fed, and leading New York commercial and investment bankers. Moreover, Meyer also distrusted President Hoover's judgment. The president was unwilling "to admit even to himself that there were limits to what he understood and could do."² Meyer, whom President Hoover once called "the most valuable man I've got," was intelligent, sophisticated and dedicated. Given \$600 by his wealthy father for not smoking before he reached the age of 21, Meyer cleverly parlayed it into the \$50,000 he needed to buy a seat on the New York Stock Exchange. There he became an enormously successful broker and financier. In accordance with plans made in his youth, he withdrew from active business management while still in his forties and entered public service, holding several positions in the agencies responsible for economic mobilization during World War I. In the 1920s, he headed the Federal Farm Loan Board and became a recognized expert on agricultural credit. Yet Meyer had no commercial banking experience, and it may even be that his Jewish ancestry further separated him from the banking community with which the Fed had to work.

Divided though they were in role and temperament, Federal Reserve lenders shared a common conception of the purpose of a banking system and of a central bank. With varying degrees of tenacity, they held to the doctrine enunciated in the Fed's Tenth Annual Report (1923):

The Federal Reserve System is a system of productive credit. It is not a system of credit for either investment or speculative purposes. Credit in the service of agriculture, industry and trade may be described comprehensively as credit for productive use. The exclusion of the use of Federal Reserve credit for speculative

^{*}Today it is known as the Federal Open Market Committee (FOMC).

and investment purposes and its limitation to agricultural, industrial or commercial purposes thus clearly indicates the nature of the tests which are appropriate as guides in the extension of Federal Reserve credit.

The implications of this credo were crucial. The Fed should lend money to member banks for reserves only when those loans (discounts) were collateralized with the right kind of productive credit assets, eligible paper. Open market operations in government securities were according to the theory, deeply flawed. In the words of Adolf C. Miller,* board member from 1914 to 1936, “. . . when the Federal Reserve banks operate as investment banks, by buying investments, they force the member banks of the country also to operate as investment banks by buying investments or loaning against investments or by making loans of the kind here described as loans against real estate.”³ Banks would end up in the precarious position of having long-term illiquid assets to cover their short term deposit liabilities. Meanwhile, the money the Fed paid for its open market purchases would find its way into inflationary speculation, not increasing output of goods and services.** Benjamin Strong and George S. Harrison of the New York Fed dissented from such strong versions of this so-called “real bills” theory of banking, but even they felt that production, not speculation, was the objective of the banking system’s activity.

The Fed’s adherence to the commercial loans banking theory was reinforced by the legal requirements it faced. Just as other banks had to keep reserves in order to offset their deposit liabilities, so too did the Fed have to hold its own reserves against its own liabilities. The Fed’s liabilities were the Federal Reserve notes it issued and time deposits that member banks kept at the Fed; the Fed was required to hold gold equal to at least 40% of the value of the notes and 35% of the amount of the deposits. At the same time, the Federal Reserve notes also had to be 100% collateralized. For this purpose, the Fed had to keep either gold or bankers’ acceptances or eligible commercial paper equal to the volume of notes it issued. Government securities purchased in the open market could not serve as this collateral. The dual requirement of a 40% gold reserve and a 100% gold+acceptance+discounted paper collateral helped tilt the Fed away from open market securities purchases, since these could not be used as collateral.

Moreover, in crises, the dual requirement for backing Federal Reserve notes might become a real problem. The internal drain from deposits to currency would raise the volume of Federal Reserve notes that needed collateral and the external drain would reduce the Fed’s gold reserve. If, in the meantime, the Fed failed to acquire enough commercial paper (either because business conditions had slowed or because it set the acceptance and discount rates too high), it would be forced to use more and more of its gold holdings to collateralize the Federal Reserve notes. The “free gold” in the Fed (gold which was not required as reserves or note collateral) would shrink, and the Fed might face its own liquidity crisis and threaten the United States’ ability to maintain the standard.

The Fed’s Experience During the Prosperous 1920s

The Federal Reserve System therefore was constrained by theory and by law to orient its activities away from open market operations, and towards discounting commercial loans made by its member banks. During the 1920s, before the onset of the Great Depression, the wisdom of the Fed’s

*Though they shared faith in the commercial loans approach, nevertheless Hamlin considered Miller a mere “time server.” (Quoted in Friedman and Schwartz, *A Monetary History of the U.S.*, p. 231.)

** As Miller put it, “When the reserve system puts money into market by open market purchases, the money goes eventually to the highest bidder, and inasmuch as the open money market of the country is first and foremost in New York where the great call market is, that is the market to which the Federal Reserve money tends to go. And where it first tends to go it has a tendency to stay.” (See Endnote 3, p. 14).

stance seemed validated by its own experience and by the performance of the banking system and of the economy as a whole.

The decade had begun with a severe recession in 1920-1921, and although the Fed's medicine was distasteful, the economy's recovery was swift. Expansive credit policies in 1919 and an external drain of gold had left the Fed's free gold at \$131 million in March 1920, down 77% from the previous June. The Fed's response had been a sharp rise in discount rates, from 4¹/₂% to 6% in March and then to 7% in June 1920. These rates were not lowered until May 1921. In the meantime, the American economy underwent severe recession. Industrial production fell by about 33% from February 1920 to March 1921; wholesale prices declined by 44% between May 1920 and June 1921. In assessing the slump, the Fed maintained that the causes had been largely external (and indeed, the recession *had* been international in character) and that the Fed's own conservative policies had ameliorated the severity of the cycle, avoided financial panic and collapse, and saved the gold value of the dollar. These were seen as the valid and necessary objectives of a central banking system.

The rapid and sustained recovery from the recession of 1920-1921 was perhaps the best advertisement for the Fed's doctrines and practices. The following two year period was highly expansive; the Fed's index of industrial production soared by 63% between the July 1921 trough and the May 1923 peak. Until 1929, the American economy remained generally prosperous. Prices were stable and only two minor recessions (in 1923-1924 and in 1927) interrupted the nation's steady economic growth. This was, as Milton Friedman called it, "The High Tide of the Federal Reserve System."

The Fed's response to the two mild recessions of the mid-1920s was in keeping with its goals and procedures. Convinced that "artificially easy money" during an economic downturn would merely flow into inflationary speculation, the Fed pursued a cautious path. Nevertheless, during each of these downturns the Fed did purchase government securities on the open market, thereby exerting downward pressure on interest rates. Its reasons for open market purchases are instructive, however, and reveal another constraint the system felt. During these recessions, the United States was running a balance of payments surplus and was receiving an inflow of gold. Perhaps the main victim of this imbalance was Great Britain. During the 1923-1924 recession, the pound sterling was still floating. In order to restore the pound to its pre-World War I parity with the dollar (as was eventually done in May 1925), the United States would have to experience higher inflation rates and lower interest rates than Great Britain. This would increase the value of the pound sterling relative to the dollar. In 1927, having restored the gold standard and facing endemic payments deficits, the United Kingdom still needed these conditions in order to stay on gold. Benjamin Strong of the New York Fed was a close friend of Montagu Norman, governor of the Bank of England, and was eager to adjust American policies to ease the problems of the British. Indeed, Governor Strong held one crucial conference with central bankers of major European powers in 1927 without even notifying most Federal Reserve Board members. In short, then, the willingness of the Fed to make open market securities purchases during the recessions of the mid-1920s stemmed from international considerations, not from a desire to stimulate the domestic economy.

Federal Reserve Policies in the Depression: 1929-1931

The onset of the Great Depression in 1929 shifted the constraints facing the Federal Reserve System but did not drastically alter its philosophy. Nevertheless, the Fed responded to circumstances and it can be said that changing circumstances modified some economic policy makers' ideas.

In the early months of the depression, the Fed supplied bank reserves through sizable purchases of government securities on the open market—\$341 million between November 12, 1929 and January 28, 1930. Discount rates at the New York Fed dropped from 6% to 4¹/₂% and bill-buying

rates were cut by comparable amounts. At the January 1930 meeting of the Open Market Policy Conference, New York argued for more open market purchases, but the majority of the committee was persuaded that credit was already easy to obtain and that more purchases were therefore undesirable. This division between Harrison at the New York Fed and the governors of most of the other Reserve banks was to continue for most of the next two years. There were few more open market securities purchased, and although discount and bill buying rates were lowered (with the New York Fed's rate reaching 2% in December 1930), member bank borrowing from the Fed shrank by 83% between July 1929 and September 1930.

In the fall of 1930, a wave of bank failures indicated growing strains on the financial system. Small banks in farm regions were especially vulnerable when farmers, whose crop prices had plunged, were unable to repay their loans. In December 1930, however, the Bank of the United States with over \$200 million in deposits, failed, the largest bank failure in American history. The Bank of the United States was an ordinary commercial bank but carried a name that made some think it was a government institution. Its collapse further weakened faith in the financial system. The "internal drain" of deposits to currency was underway; the ratio of all commercial bank deposits to currency held by the public slipped from 11.54 to 10.57 between October and December 1930 and continued to slip rather steadily through 1931 and 1932. Largely at the prodding of Harrison, and with general support from Governor Meyer, the OMPC and the board approved of some further open market purchases of government securities which were undertaken in the summer of 1931. Bill-buying and discount rates had been lowered that spring, provoking one economist to write to Harrison: "It is an historic event—the lowest rate [$1\frac{1}{2}\%$] that has ever been established by a central bank in any country. It signifies, I suppose, that we are experiencing the worst depression that has ever been recorded."⁴

At the August 1931 meeting of the Open Market Policy Committee, Harrison presented the case for authorizing \$300 million more in open market purchases to add reserves to the member banks. Reducing the discount and bill buying rates had done no good; there was adequate free gold in the Fed, and although interest rates on the very highest grade of bonds were low, the bond market in general was depressed. There were few buyers for railroad bonds in particular, and the bonds which sat in the asset portfolios of commercial banks were priced too low. Harrison agreed that immediate large open market purchases would probably not alleviate this condition, but he wanted the Fed to be able to jump into the market if it appeared that purchases "might encourage or facilitate recovery."⁵ But the conference authorized only \$120 million, and the board approved the lower figure. Notably, however the previously cautious Adolf Miller joined with Eugene Meyer on the board in advocating "bold, experimental use" of open market purchases, "even though it might only serve to demonstrate the limits . . . of such a policy."⁶

The open market purchases approved in August were not implemented because of the onset of the crisis brought about by Britain's leaving the gold standard. Instead, the crisis provoked the response best explained by Walter Bagehot, the English banking theorist.⁷ As Bagehot pointed out, "periods of internal panic and external demand for bullion [precious metal] commonly occur together The holders of the reserve have, therefore, to treat two opposite maladies at once—one requiring stringent remedies, and especially a rapid rise in the rate of interest; and the other an alleviate treatment with large and ready loans."⁸ Therefore, the prescription for "this compound disease" was "very large loans at very high rates." Bagehot added that carrying off this feat required "the greatest delicacy, the finest and best skilled judgment . . . to deal at once with such great and contrary evils." Within days of the British announcement, the Fed acted to stop the external drain of gold. It raised the minimum bill buying rate from 1% to $1\frac{1}{4}\%$; by October 16, three further increases kind occurred and the rate stood at $3\frac{1}{8}\%$. For over two weeks prior to this, however, the discount rate had remained unchanged. The New York Fed's directors and officers had first met on October 1, 1931; rather than increase the discount rate, they decided not to act, fearing that foreigners would interpret a rate increase as a sign of panic. After the meeting, however, Eugene Meyer pointedly told Harrison that he had expected New York to raise the discount rate. A week later, the New York bank did act, setting

the rate at 2¹/₂% and the Federal Reserve Board unanimously approved. And on October 16, the New York discount rate was put at 3¹/₂%.

The Bank of France played a large role in inducing the Federal Reserve to tighten credit as it did in October 1931. At the onset of the crisis the month before, the Bank of France held dollar deposits of \$600 million in the United States. Fiercely committed to the gold standard, the directors of the Bank of France had long doubted the wisdom of holding foreign exchange (i.e., dollars)—subject to devaluation and other disasters—when they could hold gold instead. To induce the French to keep their deposits in the United States and not to export gold, interest rates in the United States had to rise. The French were not subtle about this. Governor Moret of the Bank of France wired to Harrison on September 1930, “I take this opportunity to call your attention to the consequence under present circumstances of the very low level of money [interest] rates.”⁹ During October, French pressure for higher interest rates and for American monetary conservatism increased. “France evidently feels,” noted Hamlin in late November, “that it put a pistol at Governor Harrison’s head and made him promise to be conservative and not to permit inflation.”¹⁰ Yet Harrison unequivocally denied that he had made any deal with the Bank of France for it to keep its deposits in New York in exchange for tight money. Nevertheless, it is true that gold exports to France subsided in late 1931 while the Fed kept its interest rates up and then accelerated in early 1932 as American discount and acceptance rates were lowered. In the face of a more expansionary policy during the fall crisis, gold exports to France might have counteracted the Fed’s efforts to pump reserves into the system.

French gold withdrawals were only part of the more general, though less immediate, problem of maintaining the gold standard in America. This was an unquestioned goal among American policy makers both at the Fed and in the Hoover administration. Yet, if the external drain were not eventually halted, the Fed would at some point lack the gold needed to cover reserve and collateral requirements. In the long run, the United States might not be able to convert dollars to gold at the fixed rate of \$20.67 per fine ounce.

In raising interest rates in the face of the fall 1931 crisis, the main decision makers at the Fed believed not that they were instituting a reign of tight money but that they were putting an end to a period of abnormal ease. They hoped that raising the discount and acceptance rates would increase open market interest rates for commercial loans. This would have the beneficial effect of increasing commercial banks’ cash flow and earnings. If anything, banking experts maintained, the higher rates would induce banks to make more, not less, money available to accommodate business transactions. As believers in the commercial loan theory, they put little faith in the alternative policy of open market purchases of government securities. At best, the central bank would be injecting money that would sit as idle, excess reserves in the nation’s commercial banks. At worst, the funds would be used for speculation and would breed inflation, not recovery. Even Harrison and Meyer, the members most sympathetic to open market securities operations, agreed in the fall of 1931 that buying high-priced, low interest government bonds would do little to help raise the depressed prices of railroad and other corporate bonds that were dragging down the asset portfolios of the nation’s banks. Open market operations were, they felt, a shotgun approach where careful aim was required.

The Fed’s policy in October of raising discount and acceptance rates and refraining from open market purchases won broad business approval. The *Commercial and Financial Chronical* for example, felt that it was high time for such moves: “A valuable lesson has been learned... that business revival and confidence in security values cannot be brought about by adventurous methods, that is, extending the volume of banking credit and increasing the volume of the currency. Federal Reserve easy money policy involved both... when there was not the least justification for it in the needs of trade. It is well that these unpardonably low rates are now to be withdrawn.”¹¹ Even *Business Week*, which generally favored easy money policies, conceded that the danger of a \$2 billion gold outflow “undoubtedly justifies the advance in money rates.”¹²

By November and December, monetary conditions seemed to be easing. The gold outflow stopped and some was even imported. Although the public did continue to convert deposits into currency, this internal drain on the banking system flowed much less rapidly in November and December 1931 than in the weeks immediately following the British departure from gold. The Fed actually felt confident enough to buy about \$230 million of government securities on the open market during December 1931 (largely to supply funds for Christmas shopping and to finance a Treasury deficit), but it quickly sold \$200 million by mid-January. Bank failures in the last two months of 1931, though still high, were down 36% from the previous two months. The economy was still in the doldrums and the financial system still fragile at best, but it looked to many as if the crisis were over and the worst had passed.

Endnotes:

- ¹ *Memoranda concerning the Federal Reserve Board taken from the Diaries of Charles S. Hamlin* (Washington, DC: Library of Congress, 1984, microfilm).
- ² Merlo J. Pusey, *Eugene Meyer* (New York: Knopf, 1974), p. 212.
- ³ Lester V. Chandler, *American Monetary Policies* (New York: Harper & Row, 1971), p. 13.
- ⁴ Chandler, op. cit., p. 156.
- ⁵ *Ibid.*, p. 157.
- ⁶ *Ibid.*, p. 158.
- ⁷ Walter Bagehot, *Lombard Street* (London: Henry S. King, 1873).
- ⁸ *Ibid.*, p. 56.
- ⁹ Chandler, op. cit., p. 170.
- ¹⁰ Diaries of Charles S. Hamlin, op. cit., Vol. 19, p. 16a.
- ¹¹ *Commercial and Financial Chronicle*, Oct. 10, 1931, p. 2305.
- ¹² *Business Week*, Oct. 28, 1931.