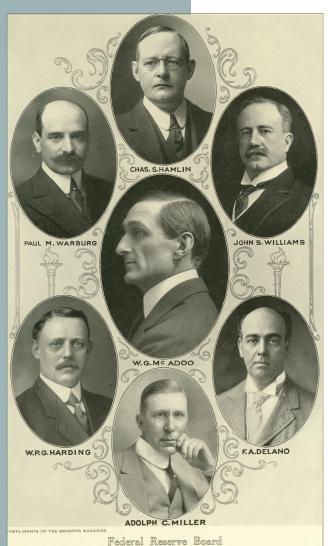
2011-02: Twelfth District Policymaking: The Early Years

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n the early decades of the twentieth century, the Federal Reserve System charted its course as a new central bank for an expanding nation. During this period, individual Reserve Banks, including the San Francisco Fed, practiced policymaking for their respective regions with relatively greater independence than what they have today. This autonomy lasted until the passage of reformist legislation in the 1930s, which placed the Board of Governors at the center of policymaking.

The Federal Reserve Act and Reserve Bank Autonomy



Federal Reserve Board, 1914. Image courtesy of the Federal Reserve Bank of San Francisco Archive. The design of the Federal Reserve System represented a compromise between proponents of a European-style central bank and those favoring a looser system of regional banks that could be responsive to local credit needs. The final structure as described in the Federal Reserve Act of 1913 reflected this compromise. The Reserve Banks appointed a majority of directors from within their district, they could set their own discount rate and bankers' acceptance buying rate (subject to the Federal Reserve Board's approval), and they could engage in open market operations as they saw fit (Timberlake 1978, pp. 186-199 and Wheelock 1991, p. 69). Interestingly, the original Federal Reserve Act failed to distribute authority within the System clearly, thus creating an unclear relationship between the Board and the Reserve Banks—a fact that would add uncertainty to policymaking in the 1920s and early 1930s.

The Federal Reserve Board did not exercise much influence on policy in the System's early years, which may have set the tone for stronger Reserve Bank independence. As specified in the Act, the Board's role in monetary policy was largely supervisory. It could approve or reject rate changes and open market operations proposed by the Reserve Banks, but whether it had the power to initiate policy was less clear (Wheelock 1991, p. 69). Charles Hamlin, a member of the Federal Reserve Board from the System's inception, testifying before the U.S. Senate Banking Committee stated, "As a matter of fact, each one of those Federal Reserve banks essentially is a central bank with autonomy of its own. It has practically all the powers that any central bank in Europe has" (p. 70).

War World I and the Federal Reserve Banks

The Fed had existed for less than three years when the United States entered World War I on April 6, 1917. The war represent-

ed a watershed economic event in the twentieth century. Financial and goods flows were disrupted as countries turned inward, severing trade ties and placing embargoes on the shipment of goods and gold. The declaration of war by the Allies in August 1914 led to gold outflows from the United States as countries attempted to repatriate



Liberty Bond Poster, 1917. Image courtesy of the Library of Congress, Prints and Photographs Division.

funds to finance war activity. The international gold standard— a system of fixed exchange rates that had operated since the nineteenth century—broke down as countries eventually erected barriers to gold flows and decoupled the link between gold and their currencies; the United States was an exception to this decoupling and retained the gold standard. Belligerent countries declared moratoria on the movement of funds back to the United States so that they could hold onto their gold reserves for war material (Cross 1927, p. 756). The situation therefore challenged both businesses and banks in the United States. Nevertheless, many states in the Twelfth District, particularly California, prospered as a result of the war. Shipyards in the state built more than half of all sea vessels used in the war, and agricultural production flourished, with planted acreage in wheat rising by 16%, rice by 27%, and cotton by 33% (Cross 1927).

One problem that arose as a result of the war and the shortages arising from countries embargoing and hoarding gold was the need for currency to finance trade. In 12 cities east of the Rocky Mountains, the solution came via clearinghouses, which issued loan certificates amounting to \$196 million. However, this was less common in the Twelfth District. For example, national banks in California invoked the Aldrich-Vreeland Act (1908) and organized National Currency Associations, which issued additional bank notes secured by commercial paper and non-U.S. government bonds. This emergency currency was used to meet the needs of trade. Although the Aldrich-Vreeland Act was set to expire in 1914, it was extended to June 30, 1915, pending pas-

sage of the Federal Reserve Act. This proved fortunate because national banks ended up circulating \$284 million through National Currency Associations (Cross 1927, p. 767). As the San Francisco Fed gained its footing, eventually \$56 million of gold poured into the coffers of the Reserve Bank, and paper currency was issued to satisfy local currency demands.¹

During World War I, the U.S. Department of the Treasury dominated the policymaking, with the Secretary of the Treasury serving as ex officio chairman of the Federal Reserve Board. However, important advances in monetary policymaking were taking place. A 1916 amendment to the Federal Reserve Act permitted Reserve Banks to provide reserves to member banks against their holdings of government securities or other eligible paper (Wheelock 1991, p. 14). During World War I, the Fed offered a preferential discount rate on these loans, and between April 1917 (when the United States entered the war) and December 1918, member bank borrowing increased from \$34 million to \$1.8 billion. The Fed did not purchase large quantities of government debt during the war, but it made it profitable for member banks to do so by providing reserves inexpensively.

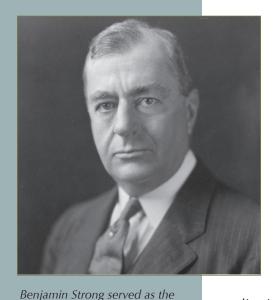
Importantly, since the reserves were supplied against government securities, they represented a clear departure from the Real Bills Doctrine, a term that has been used to characterize the early period of Federal Reserve monetary policymaking. Under

¹ Financial crises prior to 1913 were seen as resulting from "inelasticity" in the supply of currency and bank credit. "Under the National Banking system there was no formal mechanism to add to the supply of currency during a panic.... The volume of national bank notes was tied to bank holdings of U.S. government bonds, and unless the quantity of bonds outstanding changed, there was little flexibility in the supply of notes" (Wheelock 1991, p. 11).

the Real Bills Doctrine, Federal Reserve officials envisioned a system in which the stock of money would rise and fall with economic activity and Federal Reserve Banks would provide an "elastic" supply of currency by rediscounting short-term, self-liquidating commercial notes for member banks. When the demand for commercial loans was high, banks could increase their lending capacity by rediscounting with the Federal Reserve. When loan demand fell, rediscounts would decline. In the face of heavy withdrawals, as in a banking crisis, member banks could obtain additional currency, in the form of Federal Reserve notes, by rediscounting. Hence, the Real Bills Doctrine envisioned a system through which, by limiting the types of loans eligible for rediscount, the Fed could potentially maintain a sufficient supply of bank credit to accommodate the needs of trade as well as provide additional currency to meet emergency demands without promoting financial speculation or inflation (Wheelock 1991).

The Fed was criticized for its actions immediately after World War I and for the dramatic swing in the overall price level between 1918 and 1921. Cross describes the conditions in the wake of the end of the war in the following way (1927, p. 767):

"For a little over a year, prosperity continued to smile upon the nation's business, prices rose, employment was general, and abundant opportunity existed for the investment of funds. Then suddenly the crash of 1920 occurred, followed by a violent financial and industrial adjustment. Five million men were unemployed, factories and mines were closed, prices tumbled headlong towards lower levels, bank after bank went into the hands of receivers."



first Governor of the New York Federal Reserve Bank from October 5, 1914 – October 16, 1928. Image courtesy of the Federal Re-

serve Bank of New York Archive.

Agriculture was particularly hard hit, and in 1922, Congress set up an inquiry to examine whether the Fed had contributed to high borrowing costs and falling commodity prices. New York Federal Reserve Governor Benjamin Strong argued against the view that the Fed had caused deflation in the economy. Nonetheless, according to Wheelock (1991, p. 15), "the episode demonstrated discontent with the Fed's behavior during the 1918-21 price cycle." In response, the Fed appears to have changed its behavior significantly after 1921. In particular, between November 1921 and May 1922, Reserve Banks, acting on their own accord, purchased large quantities of government securities.

The U.S. Treasury Department objected to the decline in Treasury yields that resulted from these open market operations because it made it hard for them to sell new issues. To avoid future clashes with the Treasury, in May 1922, the Reserve Banks agreed to coordinate their purchases and sales through a Committee of Governors on Centralized Execution of Purchases and Sales of Government Securities. The Committee's deliberations extended to credit

policy in general, including discount rates. Although the committee's decisions were not binding, orders were coordinated and executed through the New York Federal Reserve Bank (Wood 2005).

Policymaking by the Reserve Banks in the 1920s

As the post-war debate shows, the Fed had only just begun to use discount rate policy and open market operations as a tool for monetary policy and to exercise control over credit. Before 1922, Reserve Bank investments were largely made to support Treasury securities or bankers' acceptances, or for revenue. In April 1923, the Open Market Investment Committee replaced the Governors Committee, and a Special System Investment Account was established at the Federal Reserve Bank of New York in December 1923 to handle the committee's operations (Wheelock 1991, p. 16). Many within the system saw this as an attempt by the Board of Governors to exert more control over



Federal Reserve Bank Board of Governors meeting, date unknown.

Image courtesy of the Library of Congress, Prints and Photographs Division.

the regional banks and harmonize policymaking. The Board argued that their supervision was necessary to assure compliance with the Federal Reserve Act, specifically 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" (Wood 2005, pp. 189-190). Regardless, it further cemented the fact that the Reserve Banks were using open market operations in government securities and secured discount loans to manage credit markets. The Fed had moved away from a Real Bills Doctrine to a more activist policy than envisioned by the founders of the Fed (Wheelock 1991, pp. 8-14).

Discount Rate Policy

The discount rate was intended to be the principal policy tool of each Federal Reserve Bank. Although the Federal Reserve Act gave no explicit instructions on how it should be set, it was assumed that the Reserve Banks would follow the rules of the game of the gold standard and, in the face of a gold outflow, increase their discount rates to put sufficient pressure on market rates to stop the outflow. Similarly, discount rates were to be lowered in response to gold inflows.

Although the Reserve Banks considered national goals and often coordinated their discount rates, before 1935 these rates often differed considerably across the Reserve Banks, reflecting variation across regions in lending as well as policymaking. During the 1920s, most officials at the Reserve Banks believed that differences in their rates influenced the flow of funds between districts (Wheelock, p. 78). When the Senate Banking Committee surveyed the Reserve Banks in 1931, all of the banks except for New York opposed uniform rate setting. As explained by the San Francisco Federal Reserve Bank, "If there were one rate uniform in all districts, it would usually be a rate determined in the principal money center, New York, and usually be an improper rate in many other districts. There should also be at times variation influencing the flow of funds from one district or section to another" (United States Senate 1931, p. 778).

At times, there were substantial disagreements in how rates should be set, and given the degree of autonomy each bank had in setting its rate, it is no wonder that rates differed. The New York Fed often set its rate below other Reserve Banks, reflecting lower borrowing costs than other parts of the country, but officials at both the Chicago and San Francisco Reserve Banks often disagreed with the New York Bank's rate. Figure 1 shows the path of San Francisco's discount rate relative to the New York Fed's. For example, during the 1924 recession, Chicago bucked the trend of other Reserve Banks and did not lower its rate below 4%. San Francisco kept its rate 50 basis points (one-half percentage point) higher than New York as well. And in 1927, all Reserve Banks lowered their rates to 3.5% to reverse gold flows from England and stimulate economic activity, but Chicago and San Francisco only did so after significant pressure from the Federal Reserve Board. Wheelock (1991) comments,

"Whether or not the Federal Reserve had the authority to force the Reserve Banks to change their discount rates also was unclear. In October 1927 the Board had ordered the Federal Reserve Bank of Chicago to reduce its discount rate, and the Bank complied. [Treasury Secretary] Carter Glass argued in 1931 that the Board did not have this authority, but did believe the Board had the power and responsibility to determine

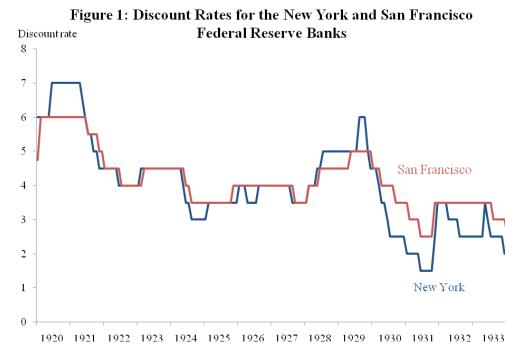


the type of paper eligible for rediscount and to force the Reserve Banks to refuse discount loans to member banks which the Board believed had abused the borrowing privilege" (p. 72).

Both Chicago and San Francisco were among the first banks to increase their rates in 1928. Chicago did so because of concerns about a "further expansion of speculative credit," while San Francisco raised its rates after the earlier reduction "was found to have been a mistake" (U.S. Senate 1931, p. 77). In 1928, Reserve Banks increasingly worried about the frenzied state of the stock market and about the possibility that New York would raise its rate, inducing funds to flow out of their districts and putting pressure on reserve ratios to decline. While most of the Reserve Banks had increased their discount rates to 5% by mid-1928, four, including San Francisco, kept their rates at 4.5% until May 1929 (Wheelock 1991, p. 79).

Carter Glass served as the United States Senator of Virginia from February 20, 1920 – May 28, 1946.

Image courtesy of the Library of Congress, Prints and Photographs Division.



Open Market Operations

Before 1924, Reserve Banks primarily relied on the discount rate to control credit, but thereafter, purchases and sales of government securities became increasingly important. One reason for this change was that influential Fed officials, such as the New York Fed's Governor Strong, believed that changes in discount rates were more effective and less disruptive if open market operations preceded them (Wheelock 1991, p. 19). The greater reliance on open market operations also enhanced the power of the New York Fed because open market purchases by other Reserve Banks were coordinated by the Open Market Investment Committee beginning in 1923 and carried out in New York City. Moreover, since Governor Strong headed both this committee and its successor, the Governors Committee, New York continued to dictate much of open market policy throughout the 1920s (Wheelock 1991, p. 72).

Officials used open market operations to promote monetary easing during business cycle downturns which, at the time, were gauged by the levels of member-bank borrowing and market interest rates. For example, they concluded that the purchase of \$500 million in securities in 1924, combined with gold inflows of \$200 million, increased nonborrowed reserves by \$700 million and that rates on commercial paper and other short-term instruments fell in response. Fed officials believed that the purchases of government securities in 1924 and 1927 had been effective as a policy lever, but some officials questioned whether they should have been made in those years (since they may have fueled a boom in asset prices). Further, most officials thought that sales of securities had been insufficient in 1928 to stem stock market speculation. Within the System, many officials still believed in the Real Bills Doctrine and thought that the supply of credit should decline during recessions; otherwise, an excess supply would generate speculation or inflation. This fear infected Fed thinking well into the 1930s (Wheelock 1991, pp. 100-101).

As was the case with discount rate policy, disagreement over the right path for open market operations became more pronounced in 1928. Governor Strong apparently argued against any attempt to influence stock market speculation through these operations, and, if anything, preferred discount rate increases to discourage the financing of speculation with Federal Reserve credit. The Federal Reserve Board disapproved applications by banks to increase their rates to 6% and directed the Reserve Banks to pursue a policy of "direct pressure" in which discount loans were to be refused to any bank carrying stock market loans. The Reserve Banks countered that it was impossible to control the use of reserves supplied by discount loans (Wood 2005, pp. 189-190). This set the stage for a series of problems in decision making that would plague the Federal Reserve System throughout the Great Depression (Wheelock 1991, p. 73). As Friedman and Schwartz (1963, pp. 265-266) argue, the disagreement meant that neither policy was fully implemented and, as a consequence, system policy was "clearly too easy to stem the bull market and almost surely too tight to permit the continued expansion of business activity without severe downward pressure on prices." At ten meetings, the last of which was May 23, 1929, the Board of Governors rejected the New York Fed's request for discount rate increases to stem stock market speculation, even though this action was supported by virtually the entire Federal Reserve System outside of Washington (Friedman and Schwartz 1963, p. 259).

However, with signs that economic activity was slowing, the Reserve Banks changed course thereafter. The policy decision was to allow New York to raise its discount rate to 6% with the understanding that no other Reserve Bank would do so. Simultaneously, the Fed would carry out open market purchases. The reasoning seemed to be that a higher rate in New York would stem stock market speculation but open market purchases would encourage business activity. Of course, as Wicker (1965, p. 84) points out, this episode demonstrates that many Federal Reserve officials did not understand that the method of injecting reserves was not the key determinant of monetary policy, but rather the total reserves injected: "Lack of knowledge, not lack of courage, was the real explanation for the deficiencies in the Fed's policy."

Conflicts of Interest and the Great Depression

After the stock market crash of October 1929 and during the Great Depression, disagreements among the Reserve Banks and the Board of Governors over the proper course for monetary policy continued. In the 1930s, some members of the Board supported the New York Fed's proposals for expansionary operations, but the Board's inability to successfully apply "direct pressure" to fight stock market speculation or sway a majority of the Reserve Banks to support expansionary policies during the Depression suggests how weak the Board was (Wheelock 1991, p. 73). In comparison to the period 1924-29, the Fed used open market operations less aggressively during the early 1930s.

Friedman and Schwartz (1963) have suggested that the Fed would have pursued more expansionary policies if New York had retained its leadership position, but Governor Strong's death in 1928 weakened its position vis-à-vis the Board and the other Reserve Banks. In their eyes, the Fed's failures during the Depression resulted from the "shift of power within the System and the lack of understanding and experience of the individuals to whom the power shifted" (Friedman and Schwartz 1963, p. 411). During the Depression, the Reserve Banks did not follow the New York Fed in lowering their discount and acceptance buying rates, and the Open Market Investment Committee failed to approve many of the security purchases proposed by New York.

The committee was replaced by the Open Market Policy Conference in early 1930. This included all 12 governors (not just the five that were on the old committee). They "came instructed by their directors rather than ready to follow the leadership of New York as the five had done when Strong was governor.... And, the other Banks...had no background of leadership and of national responsibility. Moreover, they tended to be jealous of New York and predisposed to question what New York proposed." (Friedman and Schwartz 1963, p. 414). The Board remained too weak to dominate policy before 1933 (Wheelock 1991, p. 4).

Following the stock market crash, market rates fell sharply and continued to decline until the fourth quarter of 1931. Many officials wrongfully thought that the low rates were a sign of monetary easing, and therefore there was no need for additional open market purchases to promote recovery. The discount rate reductions by the New York Fed in 1930 and 1931 were primarily done to keep them in line with market rates (as had been practiced in the 1930s). According to Wheelock (1991), many officials at Reserve Banks and the Board did not respond more aggressively because they thought a situation of monetary easing already prevailed and believed that member bank borrowing was generally unresponsive to the discount rate or to the difference between the discount rate and the market interest rate.



New Federal Reserve Building taken from the Munitions Building circa 1937.

Image courtesy of the Library of Congress, Prints and Photographs Division.

Restructuring the Fed

The Banking Act of 1935 finally settled the issue of where power would reside within the Federal Reserve System. Control was centralized in the Board of Governors despite resistance from some Fed officials. Treasury Secretary Glass viewed the failures of policy during the Great Depression as stemming in part from the diffuse authority within the System and argued for a change in structure. The Act changed the structure of the Fed System in the following ways: (1) it raised the number of Board members (appointed by the President subject to Senate approval) from six to seven; (2) it made the heads of the Reserve Banks (now called presidents) appointees subject to Board approval, which had not been necessary under the 1913 Act; (3) it created a Federal Open Market Committee (FOMC)

with 12 members, consisting of the Board of Governors, the president of the New York Fed, and a rotating group of four Reserve Bank presidents; and (4) it designated the chairman of the Board of Governors as the chairman of the FOMC so that open market operations would henceforth be initiated in Washington (Wood 2005, p. 220).

Wicker (1965) and Temin (1989), in contrast, argue the death of Strong had little impact on policy and that the gold standard dominated policymaking. Not until March 1933, when Roosevelt devalued the dollar and began to replace conservatives on the Board of Governors was there a change in monetary regime (Temin 1989, pp. 95-8).

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