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# The Establishment and Evolution of the Federal Reserve Board: 1913–23

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When, on December 23, 1913, Woodrow Wilson signed the act establishing the Federal Reserve System, he felt grateful, he said, for having had a part in “completing a work . . . of lasting benefit to the business of the country.” The nation had been without an organization performing central banking functions since the charter of the Second Bank of the United States had expired in 1836. Financial stresses caused by the Civil War and a series of devastating liquidity crises and bank failures, especially the Panic of 1907, had focused public awareness on the need for banking and monetary reform. The Congress passed the Aldrich–Vreeland Act of 1908, which provided for the issuance of currency in an emergency. The act also created the bipartisan National Monetary Commission, headed by Senator Nelson Aldrich, to study banking and currency reform and to develop some recommendations. After making a detailed study of banking in Europe and North America, the commission in 1912 published its findings in 38 massive volumes. Aldrich formalized the commission’s recommendations in a bill, generally known as the Aldrich Plan, calling for one central bank and 15 branches.

Although members of the Congress agreed on the need for reform and on its general goals, they differed strongly on its shape. The Aldrich Plan stirred up a deep-seated distrust of the centralization of power and of the banking establishment. Alternative plans, which attempted different balances between public and private interests and between central and regional control, were proposed. The members finally overcame their partisan differences and adopted the

plan forged by President Wilson, Congressman Carter Glass, and Senator Robert Owen, which became the Federal Reserve Act—an act “to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes.”

While the process of investigation, discussion, and compromise leading to the act had ended with President Wilson’s signature, another long process was beginning: that of organizing and establishing in practice the central banking system of the United States and of developing new policies and tools to meet the changing needs and circumstances of the economy. At the time of the signing, Paul Warburg, one of the members of the first Board, said prophetically that “the Federal Reserve Act as passed should not be considered as a finality, and . . . actual experience in its operation would prove the need of important modifications or amplifications.”<sup>1</sup>

The process of modifying and amplifying the act over the next 10 years was far from smooth. H. Parker Willis, the first Secretary of the Board, in a rhetorical flourish implied that it could even be considered a war: “[The struggle that produced the Federal Reserve Act] is not merely a chapter in financial history; it is also an account of the first battle in a campaign for safe and scientific banking that has only just opened.”<sup>2</sup> Willis’s metaphor was apt. During its first decade, the System struggled to gain acceptance while facing the stresses caused by World War I and its aftermath.

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1. Paul M. Warburg, *The Federal Reserve System: Its Origin and Growth*, vol. 1 (Macmillan, 1930), p. 141.

2. Henry Parker Willis, *The Federal Reserve System: Legislation, Organization and Operation* (Ronald Press, 1923), pp. 20–21.

The System was to consist of the Federal Reserve Board in Washington; Federal Reserve Banks, each in its own district and known by the name of the city in which it was located; and member banks, that is, all national banks and those state-chartered banks willing and qualified to join. Initially, all the parts of the interdependent System struggled for acceptance. While separating those parts is often difficult, this article focuses on the struggles of the Board, which was to be, according to President Wilson, the “capstone” of the new Federal Reserve System. During its formative years, the Board had its own problems of establishing its authority, of recognizing the possibilities of its tools, and of developing its role as a policymaker. By the end of 1923, 10 years after the passage of the act, the Board was beginning to resemble the influential policymaking body it is today.

#### *PROVISIONS OF THE FEDERAL RESERVE ACT*

The Federal Reserve Board was established by Section 10 of the Federal Reserve Act. This section carefully spelled out the organizational aspects of the Board, which was to consist of “seven members, including the Secretary of the Treasury and the Comptroller of the Currency, who shall be members *ex officio* [that is, by virtue of their offices], and five members appointed by the President of the United States, by and with the advice and consent of the Senate.”

Making the members presidential appointees was an attempt by the framers of the act, and of President Wilson in particular, to keep the System under a centralized public authority so as to balance the power of private “money interests.” The earlier Warburg and Glass plans, while giving the government some voice, had given the banks that were members of the system (by subscription to stock in the regional banks) representation on the Board; and the Aldrich plan had even given the banks essential control (for a comparison of the features of the various proposals, see the box on pages 230 and 231.). But President Wilson, believing that interested, private parties should not sit on a board of control, stated:

[T]he power to direct this system of credits is put into the hands of a public board of disinterested officers of the Government itself who can make no money out of anything they do in connection with it. No group of bankers anywhere can get control; no one part of the country can concentrate the advantages and conveniences of the system upon itself for its own selfish advantage.<sup>3</sup>

Through presidential appointment of the members of the Board, the framers of the act hoped to avoid a system that had even the appearance of a monopolistic institution likely to fall victim to partisan politics as had the First and Second Banks of the United States.

Section 10 further stipulated that no more than one of the five appointive members was to be selected from any one Federal Reserve District and that the President should have “due regard to a fair representation of the different commercial, industrial and geographical divisions of the country.” At least two Board members were to be “persons experienced in banking or finance.”

These provisions for membership of the Board were intended to limit the degree to which the Board was subject to partisan pressures and to help ensure that it would not be dominated by any one interest group or region. In particular, a majority of the framers wanted to avoid giving substantial control to New York financial interests. The requirement that two members be knowledgeable in banking and finance was intended to ensure that the System would be governed by sound and “scientific” principles in addressing the commercial and financial needs of the nation.

While the President was to select the members of the Board and to designate one as Governor and another as Vice Governor, no direct line of communication was set up between the Board and the President. The salaries and operating expenses of the Board were to be paid from the earnings of the Reserve Banks rather than from congressional appropriations, but the Board was to make a full report of System operations to the Congress annually.

3. Letter, Woodrow Wilson, to Oscar Wilder Underwood, October 17, 1914, in Arthur S. Link (ed.), *The Papers of Woodrow Wilson*, vol. 31 (Princeton University Press, 1979), p. 172.

These arrangements were intended to help insulate the Board from pressures from the executive and the legislative branches.

In a further attempt to insulate the Board from partisan politics, Section 10 provided for 10-year terms for Board members. These terms were longer than those of any other executive appointees except for those of the federal judiciary, which were lifetime appointments, and that of the Comptroller General, which was for 15 years. The first appointed members were to serve varied terms of 2, 4, 6, 8, and 10 years, so that future appointments would be staggered and any future President would be unlikely to appoint a majority of the Board.

### *Powers and Duties of the Board*

While the organizational aspects appeared in one section, the powers and duties of the Board were spread throughout the act. Section 11 gave the Board the functions of examining the “accounts, books, and affairs” of the Reserve Banks and of the member banks; of permitting or requiring a Reserve Bank to rediscount the discounted paper of other Reserve Banks and to fix the rate for such rediscounting;<sup>4</sup> of regulating the amount of gold reserves held against Federal Reserve notes; of supervising and regulating the issue and retirement of these notes; of changing the number and designation of Federal Reserve cities; and of carrying out various supervisory and regulatory functions concerning the Reserve Banks. But other powers and duties of the Board appeared in sections dealing with additional organizational and functional elements of the System. For example, the Board’s power to designate three of the nine directors of each Reserve Bank appeared in Section 4; its duty to determine or define the character of the paper eligible for discounting fell under Section 13; and its power regarding rates of discount fell under Section 14, “Open-Market Operations.”

Besides being spread throughout the act, the Board’s functions were in some cases presented vaguely and indirectly, almost as an afterthought. For example, each Reserve Bank’s

power to establish rates of discount was “subject to review and determination of the Federal Reserve Board.” What “determination” meant was not clear, and so the line between the Reserve Banks’ power and the Board’s power in fixing discount rates was left ill-defined. In other instances, provisions in one part of the act seemed to contradict or overlap provisions in other parts. Thus, Section 11(a) authorized the Board to “examine at its discretion the accounts, books, and affairs of each Federal Reserve bank and of each member bank,” and Section 21 empowered the Comptroller of the Currency to “appoint examiners who shall examine every member bank at least twice in each calendar year and oftener if considered necessary” and later referred to the examinations “made and conducted” by the Comptroller of the Currency.

There were two reasons for such lack of precision. First, the act was a political compromise between different conceptions of what the Federal Reserve System as a whole, and the Board as part of that System, was to do and was not to do and what kind of checks and balances were needed. Having a public body oversee a system of privately owned commercial banks raised questions not only about lines of authority but also about what the Board’s function was and how the Board was to fulfill it. The attempt to satisfy different interests led at times to vagueness and even to contradiction. Second, the type of system that was set up by the act was new and untried. Thus, even some provisions that were less vague, such as the number and the qualifications of persons to be on the Board and the ability of the Board to alter Reserve Districts and cities, were later reinterpreted and amended as circumstances required.

### *Some Unsettled Issues*

The issues regarding the Board that the act left unsettled can be grouped into three categories: (1) the Board’s relation to the government, primarily the Department of the Treasury; (2) the Board’s relation to the rest of the Federal Reserve System; and (3) the Board’s specific role or mission within those frameworks. During the first decade of the Board’s existence, the need for its independence from the Treasury became

4. The term “rediscount” is no longer in use.

Major twentieth-century plans for a governing body for the central banking system

Plan, bill, or act		Governing body				
Name	Date	Name	Number of members	Term of office (years)	Composition	Function
Warburg Plan	November 1907; revised April 1908	Board of Managers	42	1, or until their successors qualify	Secretary of Treasury; Comptroller of the Currency; U.S. Treasurer; 6 members of Congress; 20 chairmen of branches; 12 others voted by stockholding member banks; a salaried board governor	Issue notes based on commercial bills and gold; fix the discount rate and rediscount short-term commercial paper; maintain central cash reserve; establish branches; manage and supervise activities of 20 regional bank associations
Fowler Plan	February 1908	Court of Finance	17	Serve until age 72, unless majority of Court extends appointment	6 members from Atlantic coast; 6 from Mississippi region; 4 from Pacific coast; all experienced in business and banking; one at-large appointee to preside over court; all appointed by the President	Issue notes based on secured bank assets; consider appeals from member banks not satisfied with rulings from regional associations; manage central gold reserve
Aldrich Plan	January 1911	Reserve Association Board	45	3	Secretaries of Treasury, Commerce, Labor, and Agriculture; Comptroller of the Currency; 14 members elected by boards of branches; 12 representing stockholding interests; 12 representing agriculture, commerce, and industry; governor and deputy governor	Act as fiscal agent for government; determine discount rate for short-term commercial paper, bills of exchange, and so on; engage in open market purchases
Owen Bill	May 1913	Board of Governors of the National Currency	7	Serve at the pleasure of the President	Secretaries of Treasury and Agriculture; Comptroller of the Currency; 4 governors appointed by President: 1 knowledgeable in commerce, 1 in manufacturing, 1 in transportation, and 1 in banking and credit	Exercise general supervision over reserve banks and examine accounts of national and reserve banks; act as fiscal agent for government; adjust boundaries and districts of reserve banks if necessary; supervise issuance of national currency; suspend for no more than 30 days reserve requirements specified in bill; approve reserve bank accounts in foreign countries; oversee foreign exchange operations



Glass Bill	June 1913	Federal Reserve Board	7	8	Secretaries of Treasury and Agriculture; Comptroller of the Currency; 4 board members appointed by the President, at least 1 experienced in banking	Examine accounts of reserve banks; require or permit reserve banks to discount paper of any other reserve bank; establish mandatory weekly discount rates upon each class of paper; suspend for no more than 30 days reserve requirements specified in bill; supervise and regulate the issuance of notes to reserve banks; prescribe rules for reserve banks to engage in open market operations
Vanderlip Plan	November 1913	Governing Board	7	14; staggered expiration	7 members appointed by the President; nonpartisan, government board	Approve rediscounting; oversee clearinghouse operations; issue bank notes
Federal Reserve Act (Glass-Owen Bill)	December 1913	Federal Reserve Board	7	10	Secretary of Treasury; Comptroller of the Currency; 5 members appointed by the President with due regard to commercial, industrial, and geographical representation, with at least 2 members experienced in banking and finance	Supervise and regulate the issuance and retirement of Federal Reserve notes; reclassify Reserve Districts and add Reserve Banks if appropriate; supervise the activities and audit accounts of Reserve Banks; select 3 directors, including chairman, of each Reserve Bank board; require or permit Reserve Banks to rediscount paper of other Reserve Banks; approve discount rates set by Reserve Banks; issue regulations regarding Reserve Bank open market operations
Federal Reserve Act amended	June 1922	Federal Reserve Board	8	10	Secretary of Treasury; Comptroller of the Currency; 6 appointive members; added agricultural representative and eliminated requirement for 2 members to be experienced in banking or finance	Same as above
Federal Reserve Act amended (Banking Act of 1935)	August 1935	Board of Governors of the Federal Reserve System	7	14	7 members appointed by the President, representing financial, agricultural, industrial, and commercial interests, and geographical divisions of the country; removed Secretary of Treasury and Comptroller of the Currency from Board	Exercise authority over national monetary and credit policies and, as part of the Federal Open Market Committee, help set open market policy

clearer; its struggle for power with the regional Reserve Banks, particularly the New York Bank, intensified; and its sense of its own mission and how to carry it out strengthened and solidified.

*The Board's Relation to the Treasury.* Because the Board was a public body charged with overseeing the nation's financial institutions, those who drafted the act believed that the Board clearly had to have a close relation with the Treasury. That close relation, however, raised the issue of the System's independence from the Treasury, which soon became manifest in three conflicts involving the Board: (1) about the respective responsibilities of the Treasury officials who sat on the Board and of the members appointed by the President; (2) about the Board's financial accountability; and (3) about the division of powers between the Treasury and the Board.

The Secretary of the Treasury and the Comptroller of the Currency (a Treasury Department official) sat on the Board and voted as part of the duties of their respective offices. Thus, the Treasury had a substantial influence on the decisions of the Board. The Secretary of the Treasury was designated by the act as the Chairman of the Board, but the responsibilities of this position were not spelled out. The appointed member designated by the President as Governor was the "active executive officer," but his duties, too, were left unclear. Later, Secretary of the Treasury William McAdoo interpreted "active executive officer" to mean "manager and administrator." But the heavy influence of the Treasury and the lack of a clear definition of roles put some strain on the relations among the Board members.

The act gave the Board the power to levy an assessment on the Reserve Banks to pay its expenses, including the salaries of members and staff, and thus made the Board independent of the congressional appropriations process, though it required the Board to make a yearly report to the Congress. The Treasury, however, claimed the right to audit the Board's books as the Board's funds were initially construed to be public moneys. As early as December 19, 1914, the U.S. Attorney General ruled on this issue, saying that while the moneys the Board had were

public and thus were subject to audit by an agent of the Treasury, the Board was an independent board or government body separate from the Treasury. Despite the ruling, the debate continued for a long time. (The issue of financial independence was settled with the Banking Act of 1933, which stated that the Board's funds were not to be construed as public moneys. But the lingering issue of accountability was not settled until the Federal Banking Agency Audit Act of 1978, which authorized the General Accounting Office to audit the Board.)

The division of powers between the Board and the Treasury also was cloudy. Some of the functions that the act gave to the Board overlapped those of the Treasury, as in the examination of member banks. Also, the Comptroller of the Currency chartered national banks, all of which were required to be members of the System, so the question arose as to who had regulatory power over them. (This confusion over supervisory and regulatory jurisdiction has been settled over the years through informal agreements among the System, the Comptroller, and the Federal Deposit Insurance Corporation. Generally, the System has authority over state member banks and bank holding companies; the Comptroller has authority over nationally chartered banks; and the FDIC oversees state non-member banks.)

The issue of the Board's, and the System's, independence from the Treasury caused conflicts between the two agencies and among the Board members themselves. (It was defused in part by the Banking Act of 1935, which removed the Secretary of the Treasury and the Comptroller of the Currency from the Board and placed responsibility for monetary policy solely in the hands of the Board and the newly established Federal Open Market Committee.)

*The Board's Relation to the Reserve Banks.* As established by the act, the Board had an ambiguous position vis-à-vis the Reserve Banks. The Board was a central public body having supervisory and regulatory powers over private commercial banks that were members of the System. To help ensure that commercial bankers' concerns would be heard, the act established the Federal Advisory Council, consisting of one rep-

representative from each Reserve District elected by the member banks of that District, who acted as the banks' representatives to the Board. The council was, however, empowered only to receive and provide information and to make recommendations. The Board had its representative at each of the Reserve Banks: one of the three Class C directors it appointed was designated the Federal Reserve Agent. The delineation of powers between the Agent and the Governor (now called the President) of the Reserve Bank was at first unclear. By the end of the first decade, however, the Governors had emerged as the principal leaders of their respective Reserve Banks.

But the Board was more than the government regulatory agency that President Wilson characterized as analogous to the Interstate Commerce Commission. It also had managerial duties and served to direct, coordinate, and guide the System's activities. In his 1914 opinion on the status of the Board, Attorney General T.W. Gregory stated that the Board was "not merely supervisory, but . . . a distinctly administrative board with extensive powers." These powers, however, had to be defined.

According to the act, the Board and the Reserve Banks would exercise jointly the functions of issuing and retiring Federal Reserve notes. But the act assumed that cooperation and coordination between the Board and the Reserve Banks, as well as among the Reserve Banks, would be automatic.<sup>5</sup> One example of the problems arising from this assumption regarded the discount rate, which each Reserve Bank was empowered to set for its own district. Was the rate to be uniform or to vary across the country, and was it to depend on the type of paper that was being discounted? If the rates were to vary geographically, might not money accumulate in one Reserve District while draining away from another, a situation that the act was intended to prevent? Who would then decide when the rate was to change, and what principles were to govern this decision?

Each Reserve Bank could engage in open market operations "at home and abroad" for its own earnings. Who would regulate the competition for funds that might arise among the Reserve Banks? How would the others fare against the New York Bank, the one that was the largest and most influential and likely to do the most business? How were policies regarding the discount rate and those regarding open market operations, which could work against one another, to be coordinated?

In international operations, who would speak for the System, and what body would take the initiative? After the passage of the act and even before the selection of the first Board, J.P. Morgan, Jr., and other bankers and businessmen told the Reserve Bank Organization Committee, a committee established by the act to designate the Federal Reserve cities and districts, that one Reserve Bank, probably in New York, should be of "commanding importance," especially with a view to its recognition by the central banks of Europe.<sup>6</sup> Secretary of the Treasury William McAdoo and Secretary of Agriculture David Houston, both on the committee, put forward the contrary view that the activities of all 12 Reserve Banks should be coordinated through the Board and that the Board should be the entity to which the foreign authorities looked. In practice, however, the New York Reserve Bank became the principal representative in international affairs during the early years of the System. This situation arose because of the superior knowledge and experience in international finance and the close contacts with foreign bankers of that Bank's governor, Benjamin Strong.

*The Board's Mission.* Much rhetoric surrounded the establishment of the Board. President Wilson called it the "Supreme Court of Finance," and William McAdoo saw it as a "bulwark against financial disaster."<sup>7</sup> But the rhetoric did not fit the reality of the Board's job as outlined in the act.

5. Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867–1960* (Princeton University Press, 1963), p. 190.

6. "Commanding Bank Most Needed Here," *New York Times*, January 7, 1914.

7. "New Reserve Board Sworn into Office," *New York Times*, August 11, 1914.

The Board's role and its means for filling it were not well defined because the framers of the act were concerned about limiting the Board's powers and because the System's role in the economy and the tools of monetary control had not been tested and thus were not well understood. Was the Board to be the partly automatic regulator of an organization that was generally passive except when an emergency required it to accommodate commerce and business? Or was the Board to be the central policymaker in a System that actively participated in regulating the economy through managing the availability of money and credit? The discussion in the Congress just before the passage of the act was indicative of the concerns that the legislators had about the powers of an activist central bank. Said Congressman Rufus Hardy of Texas: "A central bank, so much desired by Wall Street . . . [would have] powers for evil which the Board does not have. . . . The Board could not loan, earn, own, or borrow one dollar. It could not finance an enterprise. It could not finance a candidate or a campaign."<sup>8</sup> What the Board could or should do was not so clear.

In its *First Annual Report*, published less than six months after it was sworn in, the Board rejected a passive role for the Reserve Banks and, by extension, for itself: The System's "duty" was "not to await emergencies but, by anticipation, to do what it can to prevent them."<sup>9</sup> But because the Board was unsure of its mandate for setting policy as well as of the tools at its disposal and also because it immediately faced an extraordinary situation—World War I—it could not act according to this principle.

The muddiness in the division of powers between the Board and the Reserve Banks and between the Board and the Treasury, as well as in the conception of the Board's mission, led to floundering and conflict in the early years of the System. How powers were to be divided and duties performed had to be worked out by trial and error in an ever-changing economic milieu. In its first 10 years, the Board began to establish itself within the System and in relation to the

Treasury Department and to learn what tools it had and how to use them in setting and carrying out policy. Under pressure of circumstances, the Board, and the rest of the System, evolved in ways not foreseen by the framers of the act.

### THE FIRST BOARD

The first Federal Reserve Board was sworn into office on August 10, 1914, after a selection process that was long and difficult for several reasons. First, President Wilson had to wait for the Reserve Bank Organization Committee to select Federal Reserve cities and draw District lines because the act specified that not more than one appointive member could come from any one Reserve District.

Second, Wilson was aware of a widespread belief that the success of the Reserve System depended on his selections. Like the First and Second Banks of the United States, the Reserve Banks had been assigned a 20-year charter, and Wilson wanted the System to last. (In the McFadden Act of 1927, the Congress showed its agreement with Wilson's position by extending the Reserve Banks' charter indefinitely.) While the composition of the Board had been addressed in the act, demands persisted from various quarters that Board members have certain credentials. Some interests, for example, urged that a member of a labor union, a farmer, and a former U.S. President be placed on the Board. Wilson had to consider these requests and weigh their importance.

Third, the confirmation process took time. Two of Wilson's original choices—Richard Olney, a lawyer from Boston and a former Secretary of State, and Harry A. Wheeler, a Chicago businessman and a former president of the U.S. Chamber of Commerce—declined their appointments. A third choice, David D. Jones, a Chicagoan who was a close friend of the President, encountered strong opposition because he had been a director of International Harvester, a trust that in 1914 was under indictment for illegal restraint of trade. Jones was ultimately rejected by the Senate. A fourth choice, Paul M. Warburg, a partner in the Wall Street investment firm of Kuhn, Loeb & Company, met with suspicion

8. *Congressional Record*, September 13, 1913, p. 4865.

9. Board of Governors of the Federal Reserve System, *First Annual Report, 1914* (1915), p. 17.



because of his ties to the New York “money interests” and because of his backing of the Aldrich Plan and his original opposition to the Federal Reserve Act. After testifying before the Senate Banking Committee, Warburg, who had protested at being the only nominee besides Jones requested to appear, was finally confirmed.

Besides Warburg, the appointive members of the first Board were Frederic A. Delano, president of the Monon Railway, from Chicago; Charles S. Hamlin, a lawyer from Boston and a former Assistant Secretary of the Treasury; William P.G. Harding, president of the First National Bank of Birmingham, Alabama; and Adolph C. Miller, a noted economist and former professor at the University of California, who was at that time an Assistant Secretary of the Department of the Interior. President Wilson designated Hamlin as Governor and Delano as Vice Governor. These appointments, particularly those of Warburg and Harding, who were exceedingly knowledgeable about banking, were welcome to the business and banking communities. *The Commercial and Financial Chronicle* noted at the time that “the sentiment of the financial community as a whole on learning of the president’s nominations for the Federal Reserve Board has been one of profound relief.”<sup>10</sup>

Once appointed, the Board members were not directly responsible to the President, who had no formal channel of communication to the Board and no legal power over Board policies.<sup>11</sup> But in practice, the presence of the Secretary of the Treasury and the Comptroller of the Currency on the Board gave the Executive Branch considerable weight; and the differing interests were expressed in quite a bit of friction between the “Treasury” faction, which included Hamlin as well as the ex officio members, and the “non-Treasury” faction, which included Delano, Warburg, and Miller. In 1916, when Hamlin was reappointed to the Board for a 10-year term, some members of the Board objected to his continuing as Governor because his close connection to the Treasury threatened the Board’s

independence and because they wanted a rotation of the governorship. So President Wilson appointed Harding as Governor and Warburg as Vice Governor.

#### EARLY TASKS AND ISSUES: 1914–17

The first task of the Board was to complete the establishment of the System begun by the Reserve Bank Organization Committee. The Board had a great deal of work to do before November 16, 1914, the date Secretary of the Treasury McAdoo had set for the opening of the Reserve Banks. The Board members selected three Class C directors for each of the 12 Reserve Banks (the Class A and Class B directors were elected by the member banks in each Reserve District); drafted uniform bylaws for the Reserve Banks; dealt with staffing and housing the Reserve Banks; oversaw the design and printing of the new Federal Reserve notes; supervised the transfer of gold reserves to the Reserve Banks from the subtreasuries; set guidelines for the types of paper that were eligible for discounting by the Reserve Banks; and worked out a mechanism for discounting.

On October 20, 1914, soon after announcing the appointment of the Class C directors, the Board called a meeting in Washington of the directors and other officers of the Reserve Banks to deal with practical items that required uniformity and cooperation among the Reserve Banks, such as a check-clearing and -collection system and a method of accounting. Some of the executive officers (or “Governors,” as they then were called), especially Benjamin Strong of the New York Bank and Alfred L. Aiken of the Boston Bank, recognized the need to continue such meetings and helped to establish a conference of Governors that met several times a year to discuss common concerns and objectives. The “Governors Conference” began to take on a life of its own, to issue resolutions on System policies, and to criticize rulings and orders from the Board. In January 1916, the Board decided to check the authority of the Governors Conference by refusing to approve its expenses for a secretary and for travel not undertaken at the behest

10. In Gerald T. Dunne, “The Federal Reserve: The First Foundations,” *Business Horizons* (Winter 1966), p. 56.

11. Donald F. Kettl, *Leadership at the Fed* (Yale University Press, 1986), p. 4.

of the Board. The Board also insisted that any meetings of the group take place in Washington at a time designated by the Board. Some Governors complained that the Board was exceeding its mandated authority; but the Board prevailed and, through this early internal contest, began to define and exert its authority within the System.

Some of the tasks of setting up the System, complex in themselves, were made even more difficult because of opposition from various quarters. The establishment of a universal par check-clearance system, for example, was opposed by many member banks, particularly those in small towns, that did not want their "exchange charges," or processing fees, abolished since these were a means of earning income. (This issue actually went into litigation, and the case was not settled until a 1923 Supreme Court decision affirmed the right of a Reserve Bank to collect checks within its District for other Reserve Banks, for member banks, and for affiliated nonmember banks without paying an exchange charge.)

In a further effort to strengthen the System and to unify U.S. banking, the Board issued regulations fixing the conditions under which state banks could join the System (under the terms of the act, national banks were required to become members within a year or forfeit their federal charters). But the state banks, finding those conditions less satisfactory than the ones under which they currently operated, did not rush to join.

At the same time, the Board was developing its own staff and operations. To support its work, the Board hired a staff of 45 from 1,250 applicants, dealing with considerable pressure from various sources for particular appointments; established three divisions—the Correspondence Division, the Division of Reports and Statistics, and the Division of Audit and Examination—and a legal department under the charge of a general counsel; and appointed two administrative officers, the secretary (H. Parker Willis) and the assistant secretary (Sherman P. Allen). In accordance with the act, Treasury Secretary McAdoo provided office space in the Treasury Building for the Board and its staff. This arrangement was disturbing to some of the Board members, who suggested moving the Board's operations to

Chicago to mitigate what seemed at times to be overwhelming Treasury influence.

In May 1915, the Board created the FEDERAL RESERVE BULLETIN as a monthly publication to "afford a general statement concerning business conditions and events in the Federal reserve system that will be of interest to all member banks." The provision of statistical and other information on a consistent basis for all Reserve Districts was another move toward coordination and unity.

Soon after the Board took office, it was asked to review the decisions of the Reserve Bank Organization Committee regarding the designation of Federal Reserve cities and the drawing of District lines. Pittsburgh and Baltimore had requested designation as Federal Reserve cities in place of Cleveland and Richmond respectively. Some areas, such as Fairfield County, Connecticut, had applied to be transferred from one Reserve District to another. A few members of the Board believed that the System would be more efficient with fewer Districts. Since the capital of some of the Reserve Banks was close to the statutory minimum of \$4 million and since transferring territory among Districts could in some cases reduce capital below the limit, the Attorney General was asked for an opinion about the Board's power to readjust the Reserve Districts. On November 22, 1915, the Attorney General said that the Board could not reduce the number of Reserve Districts or Reserve Banks below 12, and on April 14, 1916, he indicated that the Board could not change the location of any Reserve Bank but that it could adjust the boundary lines of the Districts.

### *Policy Questions*

According to the act, one of the main functions of the System was to "furnish an elastic currency," that is, a currency that would respond to the regional, seasonal, and cyclical needs of the U.S. economy as well as its emergency needs. The discounting of "eligible" paper would be the primary policy tool with which to achieve this elasticity. Each Reserve Bank was to set its own discount rate, subject to "review and determination" by the Board. The act assumed the coordination of discount policy to be automatic,

relying on the gold standard and the "real bills" doctrine. That doctrine held that if credit were issued only on the basis of short-term, self-liquidating paper associated with goods in commercial transactions, money and credit would expand and contract with the volume of goods produced. However, the Board quickly saw the necessity for developing a Systemwide discount policy so that all the Reserve Bank discount rates, even if differing among the Districts, would at least bear a consistent relation to one another. In an effort to standardize Reserve Bank practices, the Board defined the different classes of paper that were eligible for discount and decided on a schedule of graduated rates based on the maturity and character of the paper discounted.

Carrying out such tasks and deciding on such sensitive issues would have been difficult enough in peacetime; but even as the Board was being sworn in and the System was being organized, war erupted in Europe. In the time of uncertainty as to whether the United States would enter the war, the Board adhered to a policy of strengthening the System for preparedness in case of the declaration of war. It attempted to maintain the liquid character of the Reserve Banks' assets, to concentrate and conserve the gold supply within the System, and to discourage excessive expansion of credit. In May 1915, the Board established the Gold Settlement Fund, with each Reserve Bank depositing with the Treasury \$1 million in gold or gold certificates. With the Board acting as a clearinghouse, the fund eliminated the need for shipments of gold in adjusting balances among Reserve Banks. In September 1916, the Federal Reserve Act was amended to permit member banks to carry all required reserves as balances with the Reserve Banks. In June 1917, the act was amended again in accordance with Board recommendations to make membership in the System more attractive to state banks and trust companies, to modify reserve requirements to increase the gold holdings of the Reserve Banks, and to make gold more available as a basis for elastic note issue. Also, the Reserve Banks began to issue Federal Reserve notes against not only gold but a combination of gold and commercial paper. Whereas earlier the centralization of the gold supply had been seen as a way of discouraging excessive

expansion of money and credit, now it was seen as a way of encouraging needed expansion. As a result of these changes, the Federal Reserve note was becoming, rather than an occasional emergency currency, the most important constituent of the U.S. "circulating medium."

### *Emergency Measures*

While the declaration of war in Europe in the summer of 1914 served to moderate opposition to the System, it diverted attention from longer-term issues to emergency measures. Although the United States was not yet directly involved in the war, the country's economic and financial systems were from the first affected by the European conflict. Fortunately, the Congress had extended the Aldrich-Vreeland Act of 1908 until June 30, 1915, which helped to prevent a panic by providing for the issuance of notes through national currency associations. This extension enabled the Board to respond to other emergency conditions caused by the war.

At first, the war curtailed ocean transportation and disrupted international trade, creating strains in commodities markets and hardships for U.S. farmers, particularly those growing cotton. The cotton crop in 1914 had been the largest on record, and the collapse of the cotton export market (which took about 60 percent of the cotton farmers' output) and the closing of the cotton exchanges in the United States and England brought pressures from the Congress on the Board to help support the price of cotton and to provide credit assistance to cotton farmers. In January 1915, the Board approved a plan for a Cotton Loan Fund subscribed to by commercial banks to supply long-term loans to farmers.

When hostilities started in Europe, the United States was a debtor nation. Its outstanding obligations to Europe, primarily to England, were large, and a substantial volume of securities payable in Europe were about to mature. To prevent a drain of gold that could endanger the U.S. banking system and to facilitate gold payments between countries, the Board and the Treasury helped set up in September 1914 a \$100 million Gold Exchange Fund from which international payments could be made. Although only a small portion of the fund was used before it was

terminated in March 1915, the existence of the fund did help to prevent panic, restore confidence in the economy, and provide an interim solution to the gold exchange problem until the Reserve Banks were fully operational.

As the war in Europe continued, the financial and monetary situation of the United States changed. Many financial centers in Europe experienced difficulties, and several stock exchanges closed. London gave way to New York as the major world credit market, and large foreign credits were negotiated in the United States. Exports, particularly those of war-related goods, increased dramatically, and gold poured into the country. From August 1914 to April 1917, the gold stock of the United States almost doubled, to \$2.85 billion.

#### *THE BOARD DURING WORLD WAR I: 1917-18*

When the United States declared war on Germany on April 6, 1917, the Board and the Reserve Banks found themselves involved in new duties and subjected to new pressures. Just before the declaration of war, Secretary of the Treasury McAdoo charged the System, which in 1915 had been made a receiver and distributor of government funds, with a new fiscal-agency function: that of issuing and redeeming short-term Treasury certificates to prepare for the floating of the \$2 billion Liberty Loan of 1917. The Board objected both to the amount of the borrowing and to the low rate of interest for the first certificates, which were for \$50 million at 2 percent. In response, McAdoo threatened to invoke the Overman Act, which would have allowed him to take over the System's funds to gain immediate control of all U.S. banking reserves in the emergency. The Board withdrew its objections. During the war, the System assisted the Treasury in floating four Liberty Bond issues; by October 1918, \$17 billion in bonds had been floated. Because of this heavy borrowing, the federal government debt expanded from roughly \$1 billion in June 1916 to \$21 billion in December 1918.

#### *Discount Policy*

In its discount policy, the Board faced conflicting objectives: (1) facilitating the war-financing, emergency operations of the Treasury, which meant keeping discount rates low, to allow the financing of the government debt at low rates, and (2) preventing the overexpansion of credit to protect business and commerce, which meant raising interest rates and using "moral suasion" to encourage a "policy of common sense practical economy" (that is, appealing to commercial interests to borrow and the banks to lend only for legitimate business needs and not for speculative purposes).<sup>12</sup> Most often, the Board sought to facilitate the Treasury's financing. Thus, the Board urged the Reserve Banks to establish preferential discount rates on loans to member banks secured by government obligations as compared with discounts of commercial paper. By 1918, the Board looked toward the time when "the war obligations of the Government have been digested, and the invested assets of the Federal Reserve Banks have been restored to a commercial basis, [so that] rates can be established with reference to the commercial requirements of the country."<sup>13</sup>

#### *Strengthening the System*

During the war, the Board continued its efforts to strengthen the System. After the 1915-16 influx, the movement of gold into the United States virtually ceased as European countries went off the gold standard. The Board attempted to conserve the U.S. gold supply by limiting exports of gold to neutral countries. It also attempted to make membership in the System more attractive to state banks. President Wilson supported these efforts, saying that membership in the System was a "solemn obligation," and many banks took heed. During the System's first year of operation, 17 state banks joined; by June 1919, spurred by appeals to patriotism and concerned about possible war emergencies, 1,042 state banks had joined, bringing the total number of

12. *Fourth Annual Report, 1917 (1918)*, p. 9.

13. *Fifth Annual Report, 1918 (1919)*, p. 87.

System members, including the 7,780 national banks, to 8,822. Responding to the growing complexity of the economic and financial system, the Board in 1918 added the Division of Analysis and Research to its staff with headquarters in Washington and a working office in New York.

The System as a whole gained strength and prestige because it was able to facilitate the mobilization of funds for the war effort and to help bring the country through the collapse of the European financial and commodity markets. The Board itself, however, felt that it was losing control not only to the Treasury but also to the New York Reserve Bank, which operated under the forceful and able leadership of Benjamin Strong. After the first Liberty Loan, the Treasury began to bypass the Board and to deal directly with the Reserve Banks, particularly the New York Reserve Bank. In 1917, in an effort to define its authority, the Board discontinued the regular meetings of the Federal Reserve Agents and those of the Governors of the Reserve Banks. It also took the stand that "in all vital matters of general policy calling for prompt and decisive action concentration of responsibility without division of authority is indispensable."<sup>14</sup> But the Board was still hampered in its attempt to assume leadership by its location in Washington with no immediate access to financial markets, with only a limited research staff, and within too easy reach of the Treasury's influence.

#### AFTERMATH OF WORLD WAR I: 1918–23

As a result of the war, the United States became a creditor nation. At first, domestic production surged with the increases in exports and U.S. government expenditures, both of which remained high for some time after the Armistice was signed on November 11, 1918. With the increase in reserves resulting from the inflow of gold and from the use of Treasury bonds as collateral for advances to member banks, credit expanded. The expansion of credit and a surge in demand for consumer goods, which had been pent up during the war years, contributed to

postwar inflation. During 1919, speculation and consumption increased while production began to drop off and, with the lifting of the gold embargo, gold began to flow out. In its *Annual Report* for 1920, the Board described the postwar economy in strong language: the year was "characterized by an unprecedented orgy of extravagance, a mania for speculation, overextended business in nearly all lines and in every section of the country, and general demoralization of the agencies of production and distribution."<sup>15</sup>

#### The Discount Rate and Controversy

As early as December 1918, members of the Board were stressing the connection between low discount rates and excessive expansion of credit and inflation. However, the Board, led by Governor Harding, believed that its duty was to cooperate with the Treasury, which wanted to float a Victory Loan in 1919. In April 1919, the Board discussed at length suggestions by several Reserve Banks to raise the discount rate but decided to keep the rate low to discourage competition with the buying of Victory bonds and to assist the Treasury in keeping the government's interest payments low. It did, however, express concern over the unhealthy tendencies in the process and discussed acting after the close of the Victory Loan campaign. During that campaign, the Board attempted to use moral suasion by issuing warnings to member banks to restrict credit except for essential purposes.

By 1920, the wholesale price index was more than twice its 1914 level, and the Board and the Reserve Banks saw clearly that, despite the Treasury's opposition, something had to be done to contain inflation and speculation. In January, with approval from the Board, the discount rate was raised from 4¾ percent to 6 percent. Member bank borrowing from the Reserve Banks still continued to mount: it went from \$1.8 billion in June 1919 to \$2.5 billion in May 1920. In May, the Board approved another increase—to 7 percent—initiated by the New York Reserve Bank and three other Reserve Banks, which went into effect in June.

14. *Fourth Annual Report, 1917* (1918), p. 29.

15. *Seventh Annual Report, 1920* (1921), p. 1.



These increases in the discount rate contributed to a brief but severe recession in business activity and to a collapse in prices in 1920–21. There was a precipitous liquidation of discount credits at the Reserve Banks, accompanied by a large-scale contraction of money in circulation. The agricultural sector was particularly affected: farmers who had incurred large mortgage and capital obligations on the basis of high wartime prices found the carrying costs beyond their means when prices dropped. Farm mortgages at many small banks became uncollectable, and in 1921 more than 500 banks failed.

Although the price collapse was international in scope, the System received much of the blame for the situation. Many of the buyers of the Liberty bonds at low interest rates discovered that bond prices fall when market rates rise and were resentful that the System had imposed capital losses on them so soon after they had bought the bonds. Charges were made in the Congress against the System, the Board, and even Governor Harding personally. Some members of the Congress claimed that the System was acting for its own benefit and not for the economy and that the System had discriminated against certain sectors, especially agriculture. Some asserted that the situation showed the misuse of funds by the Board and that some Board members acted for their own gain. Even Comptroller of the Currency John Skelton Williams, who sat on the Board, charged that the Board and the Reserve Banks had conspired to drive up rates to create deflation for the profit of bankers.

In an effort to resolve the controversy, the Board requested a congressional investigation. The Joint Congressional Commission of Agricultural Inquiry started hearings in August 1921 and submitted a report to the Congress in January 1922. The commission concluded that the Federal Reserve System had erred in not acting sooner to raise interest rates. It also established that the charges of discrimination against agriculture or of personal gain had no basis. Most important for the evolution of the Board and the System, the commission noted that the System was in a difficult position vis-à-vis the Treasury, and it emphasized that the Federal Reserve should answer, not to the Treasury, but to the

Congress. Thus, the commission, as had the Attorney General earlier, underscored the principle of the Board's independence from the Treasury.

### *Changes in the Board*

After the war, the membership of the Board, which had remained intact for nearly four years, underwent repeated changes. One seat changed four times in five years: Delano had resigned in 1918 to serve in the U.S. Army overseas, and in 1919 Henry A. Moehlenpah filled his place, to be followed in 1920 by David C. Wills, in 1921 by John R. Mitchell, and in 1923 by George R. James. From 1918 to 1921, the Vice Governorship had three occupants—Paul Warburg, Albert Strauss, and Edmund Platt—and the office of Secretary of the Treasury and Chairman of the Board had four—William McAdoo, Carter Glass, David Houston, and Andrew W. Mellon.

In 1922, as a result of the congressional investigation, an amendment to Section 10 of the act provided for an additional member of the Board to represent agricultural interests. In 1923, Milo D. Campbell of Michigan was appointed to that new position. But he died suddenly after having served on the Board only eight days, and Edward H. Cunningham of Iowa replaced him.

Governor Harding's term expired in 1922, and Daniel R. Crissinger, who had been Comptroller of the Currency, was appointed to fill the vacancy in 1923. In that year, too, Henry M. Dawes assumed the office of Comptroller and membership on the Board. By the end of the first decade, only two of the original members—Charles S. Hamlin and Adolph C. Miller, both of whom had been reappointed—were still serving (they served until 1936).

By the end of the war, the Treasury could no longer house the staff of the Board, which now numbered 345. While the Board members, the Secretary, the General Counsel, and the Gold Settlement Division still had offices in the Treasury building, the Division of Reports and Statistics and the Division of Operations and Examinations were in two other Washington locations and the Division of Analysis and Research was in New York. Coordination was at best difficult.

Thus, the Board began planning for its own quarters, which would not be completed until 1937.

### *The Board and the Reserve Banks*

During the postwar period, power in policymaking began to shift from New York to Washington, a process that continued for some years. In May 1922, the Division of Analysis and Research moved from New York to Washington, and in September of that year Walter W. Stewart replaced H. Parker Willis as director of that division. In 1923, the division was combined with the Office of Statistician and renamed the Division of Research and Statistics under the directorship of Stewart.

After the wartime hiatus in their meetings, the Governors of the Reserve Banks, led by Benjamin Strong, again sought the right to consult as a body. In May 1922, the Governors Conference met in Washington with the Board's approval (that group meets today as the Conference of Presidents). At that meeting, the Reserve Bank Governors set up the Committee of Governors on Centralized Execution of Purchases and Sales of Government Securities by Federal Reserve Banks. As originally conceived, this Governors Committee was to coordinate the Reserve Banks' purchases and sales of government securities; however, it soon began to influence policy and, as with the Conference of Governors before the war, it came into conflict with the Board. In March 1923, while Strong was in Colorado recuperating from an episode of tuberculosis, the Board asserted its jurisdiction over Reserve Bank open market operations, disbanded the Governors Committee as it was then composed, and reappointed the same officials to a new committee that would operate under the aegis of the Board. Despite disagreements about the right of the Board to act in such a manner, the Open Market Investment Committee, as it was called, had its first meeting on April 13, 1923. The Board's action brought open market operations under its direction for the first time and reduced the autonomy of the individual Reserve Banks in carrying them out. It also signaled a major change in policy.

### *Changes in Policy*

The breakdown of the gold standard in several countries during the war and the issuance of government securities to finance the war effort of the United States heralded the beginning of the end of the gold standard and the real bills doctrine as a guide to policy. There was a growing recognition among System officials that the securities transactions had affected bank reserves and thus economic conditions. Also, the large amount of speculation during 1919-20 had showed that regulations, even with the most precise definition of eligibility, could not control the ultimate use of Federal Reserve credit.

These changes in the Board's thinking on policy are indicated in the *Tenth Annual Report*. First of all, the Board and the System shifted from the sole reliance on changes in discount rates to the inclusion of open market operations in carrying out general credit policy. Thus, the Board stated the principle that Reserve Bank purchases and sales of government securities should be made with reference to prevailing credit conditions and for the accommodation of commerce and business, not just to provide earnings to the individual Reserve Banks or to facilitate Treasury financing operations. This statement put open market operations under the same guiding principle as that prescribed by the act for the discount rate. Second, the Board indicated that the need for coordination and uniformity in pursuing open market operations was the basis for its actions in setting up the Open Market Investment Committee. It also affirmed the need for uniformity in setting discount rates. Third, in recognition that it could not prevent speculation by defining the kinds of paper that were eligible for discounting, the Board asserted the principle that the quantity of paper discounted was as important as the quality in guarding against the overexpansion of credit.

In these statements, the Board demonstrated its growing ability to analyze and adapt to new uses the tools it had and its growing recognition of itself, not merely as a regulator, but as a policymaking body. The questions of the centralization of power within the System, of independence from the Treasury, and of the mission of the Board were not settled, but the process was under way.

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