# Banking Reform and the Emergence of a Corporate-Industrial Economy, 1894-1910

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My concern in this paper is to demonstrate that the movement for banking and monetary reform in the US (ca. 1894-1910) was both a symptom and an attempted cure of the decline of competitive capitalism. I attempt to show that reform of the financial system was a pressing social question, the discussion of which involved and animated the entire business community as well as broader segments of American society. I try further to show that short-term economic interest was a minor consideration in the programmatic thinking of those who led the movement. I seek to demonstrate, in sum, that according to the movement's leaders and principal theoreticians, the purpose of reform was to provide for the capacities and requirements of a modern corporate-industrial business system.

I suggest in passing that the movement for reform was the context within which a modern ruling class came of age -- that it was the preparatory school in which a corporate-industrial business elite (representing what James B. Dill called "a new order of corporation men") worked out a world view appropriate to its constituency's control over and leadership of a modern industrial society. I suggest, in other words, that the origins of the Federal Reserve System lie in the awakening of class consciousness among the leaders of the movement for banking and monetary reform.

The movement for banking and monetary reform in the US has been consistently treated as one among several internally divided interest groups that emerged during the "Progressive Era" as part of an "organizational revolution" which, in turn, ushered in a modern industrial American society. From that standpoint, the movement for reform has appeared as a bankers' movement, and the object of each of the discrete functional groups that operated within the movement has appeared as the improvement of its competitive position vis-à-vis all others [63, 33, and 61]. This model clearly lacks explanatory adequacy. It cannot integrate evidence which indicates that the movement was broadly based in the business community and in society, and more important, that the primary concern of reform-minded businessmen and intellectuals was not short-term economic interest but the long-range requirements of social stability in a corporate-industrial civilization.

The outlook and composition of the movement for banking and monetary reform between 1894 and 1900 provide good examples of what I mean. By the 1890s, most advocates of "elastic" currency issued against general bank assets rather than government bonds based their criticisms of national bank currency on a quite sophisticated theory of economic crisis. That theory, the essentials of which were worked out by Walter Bagehot in the 1870s, presumed that Say's law was invalidated by the advent of machine production: periodic crises were inevitable because the overinvestment of surplus capital and the overproduction of commodities were inevitable under modern methods of production. If crises were inevitable, the American banking system had to acquire effective countercyclical capacities, for without them each crisis would result in the complete breakdown of a society whose component parts were held together by commodity production and exchange. Hence an "elastic" currency was essential to social stability. Unless banks could lend their notes freely to deserving enterprises with temporary disregard for safe ratios between reserves and liabilities, and without prior investment in government bonds, every crisis would become a panic, and then quickly degenerate into depression [6, especially pp. 126-32; 12, pp. 459-69; 62, pp. 276-77; 38; and 56].

Not that crisis as such had to be avoided at all cost. Periodic crises were desirable so far as "weaker undertakings" -- "adventurers," "speculators," and "marginal" producers -- were purged from the economic organism. This process guaranteed the leadership of larger, conservative firms in the economy as a whole. Accordingly, the long-term function of crises was understood to be the centralization of decisions affecting production and distribution, and hence the stabilization of the investment system (for example, [31 and 18]).

Yet utter economic collapse could not be permitted, because the stability of the social system was founded on the continuous employment of labor. Moreover, if through general deflation capital invested in legitimate enterprises was allowed to be devalued to the same extent as capital sunk in speculative or unproductive enterprises, the effect of modern crises would be a redistribution of national income. As Charles A. Conant, the most important theoretician of the movement for reform, put it [12, p. 464]:

> One of the most striking effects of a commercial crisis under modern conditions is its influence upon the distribution of wealth. ...those

> laborers who continue to earn their customary wages... are benefitted materially in a period of low prices, because of the greatly increased purchasing power of their earnings. ...An industrial enterprise which continues to operate without profit or at a loss during a depression transfers all its benefits, therefore, to the wage earners, and their wealth is enhanced at the expense of the owners of inherited or accumulated capital.

Thus the obligation of banks to "lend to the utmost" during economic crisis was more than simply a duty to deserving customers: it was an obligation to a social system based on an unequal distribution of income and private investment. Conant, like Bagehot before him and Keynes after him, expected the banking system to function as the agent of capital as such by maintaining effective aggregate demand during economic crises. Without an "elastic" limit of note issue, then, the banking system could not meet its countercyclical responsibilities. This was the controlling assumption of the reform agenda after 1893.

At the same time, of course, an "elastic" currency was a practical way to undercut small entrepreneurs' demands for currency inflation. As the New York Reform Club's Currency Committee put it in November, 1894,

> A safe and elastic system of bank note issue must be devised and put in operation, both to pave the way for the retirement of the greenback issues of the Federal Government and to put a stop to the constant and dangerous demand on Congress for "more money." [19]

But reform of the banking and currency system would not be forthcoming immediately. O. M. W. Sprague's impatient explanation will serve as well as any: "The experience derived from this crisis led to no changes whatever either in banking methods or in legislation. The silver question drew away men's minds from any consideration of the questions raised by earlier crises" [43, p. 210]. This is not entirely true, since the business community and its allies in academia and the press continued actively to discuss banking and currency problems after 1894. But the question of the standard of value did become paramount by 1895, and was obviously the pivot of ideological struggle between 1896 and 1900.

In the long run, the turn from general banking and currency to specifically monetary problems broadened the social composition of the movement for reform, and deepened its understanding of the needs of a modern investment system. To be sure, the movement for reform was broadly based in the business community and in the larger American public before 1896. But, as Edward Atkinson pointed out in 1895, "those who might and may soon unite in the support of a sound system of banking... are at present unable to act together." He suggested that older businessmen were constrained by a certain loyalty to the national banking system, and fearful of the possibility that reform would produce the kind of instability that prevailed before the Civil War (Atkinson is quoted from a speech reprinted in [62, p. 332]. Cf. *Bankers Magazine* (July 1895), p. 13). But widespread support for "free silver" after 1894 convinced such men that they had more to fear from small entrepeneurs -- "debtors" -- and the competitive ideal they upheld than from a reconstruction of the banking system. *Hence lasting ties between different generations and different sectors of an emergent corporate-industrial business community were forged and cemented as a consequence of the campaign for "sound money" in 1895 and 1896.* And, as a result, the theory and techniques which this business community deployed in the ideological struggle against "free silver" were sufficiently comprehensive and sophisticated to serve as models during ensuing "educational campaigns" for broader reforms of the banking and currency system (and, for that matter, of US society).

The techniques were simple enough, although they made for basic changes in both the American party system and the American press. The organizers of the "sound money" movement initiated an "educational campaign" that operated on two levels. On one level, it was designed to "educate the educators" -- to provide local makers of public opinion with guidance on financial questions. On another level, the campaign appealed directly to mass publics, adopting by necessity the style of the immensely popular prosilver tract, *Coin's Financial School*. As A. Swan Brown, a member of the Reform Club's Currency Committee, explained to his cohorts upon seeing a particularly effective antisilver cartoon: "Although there is no argument in this illustration it is the kind of trash that I think is needed...." (See [8, 59, 40, and 60]). The leaders of the movement -- bankers, merchants, industrialists, lawyers, editors, intellectuals -- sought consciously to supplant the two major parties as the means by which mass publics were mobilized, and to free the daily press from its dependence on political parties for readers and for explanatory models of the American scene. In so doing, they produced the modern American political universe (See, for example, [36 and 37]; cf. [10]).

The organizers of the "sound money" movement also created organs of business opinion and power that were unprecedented in their scope and effectiveness. The two best examples are the National Sound Money League (NSML) and the Indianapolis Monetary Convention. Each was a direct result of informal interregional organizations that emerged during the long campaign of 1896 (ef. [5 and 29]). And the leaders of each sought representation from every sphere of business enterprise and from every section of the country. The commission chosen by the Executive Committee of the Indianapolis Convention reflected that goal. Its members were Charles S. Fairchild, president of the US Trust Company and chairman of the New York Reform Club's Currency Committee; George Leighton, an attorney for the Northern Pacific from St. Louis who had already served as president of the NSML; Robert S. Taylor of Fort Wayne, Indiana, who, as the foremost patent attorney in the nation, had established General Electric's patent monopolies; C. Stuart Patterson, dean of the University of Pennsylvania's law school, formerly a member of the Pennsylvania Railroads finance committee; Stuyvesant Fish of New York, president of the Illinois Central Railroad and trustee of Mutual Life; J. Laurence Laughlin, editor of the *Journal of Political Economy*; Louis A. Garnett, recommended as the "best all round qualified man to represent the Pacific Coast" by John J. Valantine, president of Wells Fargo and Company; Thomas G. Bush of Anniston, Alabama, a director of the Mobile & Birmingham Railway; J. W. Fries of Salem, North Carolina, a leading cotton manufacturer in the "New South"; William B. Dean, a "sound money" merchant from St. Paul, Minnesota; and George F. Edmunds, the venerable senator from Vermont [27 and 39].

The chairman of the Convention's Executive Committee was Hugh Hanna, the president of the Atlas Engine Works in Indianapolis. He worked for two years in Washington, D.C., as the liaison between the commission, the congress, and the Indianapolis Convention's broad-gauged constituency. Hanna was assisted in his labors by Charles A. Conant, who represented the commission in congressional hearings while producing several minor masterpieces of "sound money" propaganda and economic theory. The Indianapolis Convention mustered 97,000 active correspondents in congressional districts throughout the country, who eventually brought enough pressure to bear on Congress to pass the Gold Standard Act of March 1900 (see [15 and 16]).

The theoretical content of the campaign for "sound money" was just as remarkably coherent as the organizational innovations that made it effective. Almost every defense of the gold standard circulated in 1895, 1896, and after suggested that the inflation and instability resulting from the establishment of a silver standard in the US would reward only "gamblers" and "speculators" (and, ultimately, the bankers whose control of the gold supply would increase their command of commodities and labor). This was not simply a moral argument, although it certainly appealed to ethics of work and "fair play," for here the entrepreneurial persuasion itself was at issue: the object of both criticism and ridicule in "sound money" literature was W. J. Bryan's "broader class of businessmen" on the make. As Henry Farquhar put it,

> it may well be doubted whether an avowed and deliberate encouragement of debtors as a class is good policy, notwithstanding their enterprise and progressiveness. The objection that too much encouragement may make them too enterprising and too progressive, is not less well-founded than obvious. [21]

Arthur Hadley, the renowned economist and authority on railroads, was more pointed:

> While prices are gradually advancing, the more reckless speculators come into control of business by offering high rates of interest which they cannot pay unless the depreciation of the currency is still further continued. There is then sure to be a gradual overproduction of machinery....[26]

*Thus the advocacy of "sound money" was part of a larger defense of a modern, or corporate-industrial investment system, as against a system of resource allocation based on dispersed assets and competition between small entrepreneurs.*

This aspect of the ideological struggle against "free silver" was especially clear in the sound money movement's historical consciousness -- in its notions of "modernity," "civilization," and the like. To begin with, sound money men argued that the free silver forces' monetary explanation of the secular decline in prices after 1873 was inadequate for two reasons. First, the refinement in the use of credit instruments -- "a pretty accurate measure," as Conant said [12, p. 554], "of national economic progress" -- had actually enlarged the total money supply of the US; the expansion of bank deposits had made bank-note circulation "but an incident to it [13]. Second, the application of machine power to commodity production after the Civil War had drastically reduced necessary labor inputs, and thereby had decreased the overall costs of production; prices had simply been adjusted accordingly. In short, gold had not appreciated in value. These arguments normally went hand in hand, so that the development of "credit in its modern sense" [62] followed from the decline in costs of production occasioned by machine production. The sequence was eminently logical, since "banking credits" were understood to be a means of postponing consumption -- of "storing the fruits of surplus production" -- or a fund of saved capital over and above the requirements of current production. Hence "modernity" was a condition defined by a surplus of capital and expressed in an elaborate system of deferred payments or banking credits [cf. [25, 4, 26, 32 and 47]).

A gold standard was, then, critical to the maintenance and further development of a modern civilization. Silver was "not the money metal suited to the conditions of high civilization," said David Wells [*Forum*, Vol. 16 (1893), p. 140], because its value vis-à-vis its bulk was not sufficient to undergird and represent the velocity and extent of paper transactions that characterized modern industrial societies. The fact that comparatively undeveloped countries such as Mexico and China were on the silver standard was proof that it could not support an advanced system of production and exchange organized around a banking apparatus founded on deferred payments or deposits. Moreover, since the stability of the standard money metal's exchange value was crucial to the enlargement of an investment system erected on the convertibility of written credit instruments, silver did not qualify as the standard for modern civilizations. Not only was the long-term trend in its exchange value downward, but it also fluctuated violently in the short term (for example, in 1893). Thus investment would be speculative, if not altogether postponed, under a silver standard. This was a serious matter, for if "modernity" meant a surplus of capital had become the characteristic feature of the economy, rationalized methods of investing it over the long term would have to be devised in order to maintain the stability of the social system as a whole. Hence "sound money" literature was not at all apologetic about its defense of "creditors" and their vested interest in a gold standard, because they were assumed to be the trustees of modern civilization. The apocalyptic tone of the attach on "free silver" was neither accidental nor hypocritical: from the standpoint of sound money men, the issue in 1896 and after was what kind of civilization would prevail in the US [20; 34; 35; and 42, Nos. 7, 9, 11, 12, 15, and 19].

In that sense, the Gold Standard Act of 14 March 1900, was a critical turning point in the emergence of a corporate-industrial society. It was the immediate result of what Fred M. Taylor [49], an economist whose prose normally suited the dismal science he practiced, called "one of the most notable movements of our time -- the first thoroughly organized movement of the business classes in the whole country directed to the bringing about of a radical change in national legislation." Another well-known economist, F. W. Taussig, also suggested the significance of the movement behind the new legislation. He felt the Gold Standard Act opened "a new stage in the monetary history of the United States" because for the first time since the Civil War an attempt was made "'to fix and define' -- to enter on a policy deliberately chosen." The precarious situation of the Treasury and currency between 1879 and 1900, Taussig noted, "was the outcome of a succession of compromises and makeshifts; and it was allowed to stand for so long a period mainly because of the even balance of the contending sections in the community, which demanded, one a gold basis, the other a silver basis, for the whole mass of the currency." Hence the act of March 1900 symbolized the destruction of that "even balance," and the establishment of a new social-ideological alignment within which the older "compromises and makeshifts" on political-economic questions were no longer necessary or possible. These were not unrelated historical events, of course. Taussig went on to point out that "strong pressure from the business community, through the movement initiated by the Indianapolis Monetary convention," was the key to passage of the gold standard legislation [48]. *The Gold Standard Act was the middle term, then, between the coalescence of a national, metropolitan business community and the emergence of a corporate-industrial society in the US -- a society, that is, in which an even balance between agricultural and industrial interests had been superceded, and a recognizably modern political-economic universe had been established.*

With the passage of the Gold Standard Act of 14 March 1900, an emergent corporate-industrial business elite had resolved the question of the monetary standard to its satisfaction. But the banking provisions of the act did not solve the problems they addressed. Those provisions were designed to encourage the formation of national banks in rural districts, and thereby reduce instability in the New York money market caused by seasonal variations in the country's demand for currency. They failed in their purpose at a time when the money market was becoming inextricably interlocked with a stock market centered on negotiable corporate-industrial securities.

The number of national banks did increase after 1900, but, at the same time, the rapid corporate reconstruction of American industry was removing much of the former demand for bank credit outside of financial centers (that is, New York and Chicago). This meant country banks had to rely more on their deposits with reserve and central reserve city banks for profitable employment of their surplus funds; eventually, it meant country banks began to loan on their own account in the New York money market in addition to recycling their surpluses through the correspondent banking system. Hence there was an increasing volume of loanable funds in the money market that was beyond the control of its managers -- the associated banks of New York -- as a consequence of either seasonal changes in the flow of correspondent bank deposits or direct loaning on call in New York by country banks (see [55, 9, 22, 24, and 65]).

The relationship between country banks and the money market constituted a serious problem, since the New York stock market, which was essentially an extension of the money market, had become the "headquarters" of the corporate reconstruction of American industry. Seasonal variations in country banks' demand for currency had a devastating effect on the stock market because in the absence of an "elastic" currency, New York banks' shipments of lawful money to their country correspondents required the withdrawal of money from the call loan market. Yet an "elastic" currency that gave all national banks the power of note issue against their general assets promised to increase the amount of surplus capital at the disposal of country banks, and to augment the volume of loanable funds in the money market that was beyond the control of its manaagers.

Nor could the problem be solved through the deposit of US Treasury surpluses in national banks with close ties to, and effective responsibility for, the money market. Leslie Shaw's unprecedented use of his prerogatives as Secretary of the Treasury could not prevent stringencies in 1902 and in 1905, and probably enforced speculation in the stock market in 1903-1904 and in 1906-1907.

The corporate-industrial business elite's response to this impasse was hesitant at first -- above all, it was reluctant to allow the issues at hand to become part of normal political discourse. By 1905, however, the condition of the money and stock markets convinced corporate-industrial leaders that they had to draw up a detailed agenda for banking reform in order to shape political discussion of financial issues. The immediate result was the New York Chamber of Commerce report of 1906, which called for the establishment of a central bank.

As early as 1901, in the *Annual Report of the Secretary of the Treasury*, pp. 73 and 77, Lyman Gage, Secretary of the Treasury under Theodore Roosevelt, called for a central bank as the solution to the economic instability resulting from the American banking system. He warned that "individual banks stand isolated and apart, separated units, with no tie of mutuality between them. ...unless modifications be made whereby the strength of association can be secured, ...a repetition of the disastrous phenomena of 1893 awaits only the progress of time." When Gage left the Treasury and joined the US Trust Company, he immediately became a leading figure in discussions among New York businessmen on the necessity of centralizing bank reserves [45] and *Bankers Magazine*, Vol. 64 (February 1902)).

Normally this subject was approached in terms of "branch banking." In 1902, for example, James Forgan, the president of Chicago's First National Bank, argued that the "federation of interests" that had allowed the integration and rationalization of American industry should be extended to the field of banking:

> With 10,000 separate banks, each controlling its own small portion [of reserves] and scrambling to get that portion into its own custody, our reserves are scattered and the strength of the system is dissipated. In this regard branch banking has a decided advantage. Under it the cash reserves are controlled by the general management, and are placed where they are needed. They can be moved from one

> branch to another without reducing the aggregate held by the bank. The money belongs to the bank whether it is locked up in the vaults of the head office or the branches. The public mind is not therefore alarmed by the fluctuations in cash on hand that take place in the large financial centers owing to shipments to the country. [22 and 23]

But country bankers, by and large, were adamantly opposed to branch banking. Hence this solution to the problems caused by decentralized reserves was politically unfeasible.

Yet recourse to the US Treasury could not be a long-term solution to seasonal instability in the money market and periodic disruption of the emergent corporate-industrial investment system, the volume of government revenues was not predictable even in the short term, so that even if a Secretary of the Treasury was clothed with the power to intervene in the money market on a regular basis, there was no guarantee that he would be able to do so effectively. Besides, in practice, this method of stabilizing the money market and the price level only meant that interest rates were kept "unnaturally" low, and much too rapid or inflationary economic growth was thereby stimulated (see [2, 11, and 46]). "High money rates in Wall Street are not necessarily an evil for the country," as A. Piatt Andrew explained:

> A stiff rise in such rates is sometimes the very thing most needed. If the situation has resulted from the over-trading and over-speculative propensities of the community, a stringent market will spontaneously afford the best sort of remedy by forcing a reduction of bank liabilities. [3, p. 562]

By 1907, there was general agreement among economists and businessmen on this issue: they recognized that the price exacted by the money market's dependence on Treasury policy was continuous inflation -- and, consequently, encouragement to small entrepreneurs and marginal enterprise.

"Assets currency" was equally problematic. Although certain leaders of the reform movement did take the idea seriously in 1906, when it seemed the establishment of a central bank would require another long "educational campaign," this approach to reform was understood, according to *Bankers Magazine*, (Vol. 75 (September 1907), pp. 314-15) as the project of "small producers and dealers." Opponents of "assets currency" -- and they were a majority of reform-minded businessmen -- argued that it would inaugurate uncontrolled inflation and overproduction, and thus make the economy susceptible to the boom-bust cycle characteristic of the regime of competition. In their view, inflation and overproduction would result from "assets currency" for two reasons. First, the tremendous growth in the number of small state banks after 1899 (especially in the south and west) meant that prompt and continuous redemption of national bank notes could not enforce contraction of the currency -- state banks could lawfully hold national bank notes as reserves, and therefore could enlarge their loan accounts on that basis. Thus more and more small entrepreneurs would be able to convert a supposedly "elastic" currency into capital (see [52, 41, and 7]).

Second, since most of US commercial paper remained promissory notes that did not carry either the endorsement of banks or documentary evidence of its short-term, "self-liquidating" character, a currency erected on this basis would almost have to be inflationary. It would certainly encourage the conversion of currency into capital, as Laurence Merton Jacobs of the National City Bank explained:

> The promissory notes which form the bulk of our bank discounts do not so far as the banker is concerned refer to specific transactions. They do not on their face evidence the character of the particular operations which have rendered necessary accommodation from a banker. Without such evidence there is always the possibility that instead of the discount of the paper partaking of the nature of a temporary measure to relieve a temporary need it in reality becomes a loan of capital for general employment in the business... the discount of a promissory note does not carry with it any guarantee that a renewal will not be asked for or arranged elsewhere... [and] places no check on the volume of notes or paper which may be distributed among a number of banks by a single concern. [30] (cf. [57, pp. 9-25; and 46, pp. 65-79].)

Hence only a central bank could supervise the issue of a properly "elastic" currency, which would give the banking system effective countercyclical capacities without giving small or marginal entrepreneurs access to or control over capital. In short, only a central bank could stabilize an investment system in which the large industrial corporation was the dominant structural element. That, at least, was the conclusion of the New York Chamber of Commerce Currency Committee [17, p. 9] in 1906. It held that decisions governing the allocation of investment funds were entirely too uncoordinated:

> Under our present system of independent banks, there is no centralization of financial responsibility, so that in times of dangerous overexpansion no united effort can be made to impose a check which will prevent reaction and depression.

The committee itself fully represented the sociological breadth and ideological maturity of the movement for reform.

Its members were John Claflin, Isidor Straus, Dumont Clarke, Frank Vanderlip, and Charles A. Conant. Claflin was president of H. B. Claflin & Company, which he had made into one of the first integrated wholesale merchandising corporations in the US, and a director or trustee of nine insurance companies and six large banks. Straus, a Gold Democrat and intimate friend and adviser of Grover Cleveland and William L. Wilson, was a prominent associate of R. H. Macy & Company, a leading innovator in American retail merchandising. The three other members were, as a *Bankers Magazine* editorial (Vol. 72 (March 1906), p. 433) put it, "representative, in a sense, of the most important banking groups." Clarke was president of the American Exchange National Bank, a director of five railroads and numerous other enterprises (including Swift & Company and Mutual Life), and one of J. P. Morgan's trusted advisers. Vanderlip had been James Stillman's protege at the National City Bank since leaving the Treasury along with Gage in 1901; by 1906 he already had an international reputation as a leading architect and ideologue of America's corporate-industrial system. Conant had also become a pivotal figure in the design and construction of that system. When he finished his work for the Indianapolis Monetary Commission, he went to the Philippines at the request of Elihu Root, the Secretary of War, to oversee the introduction of a gold standard and a modern currency system. Thus, when Theodore Roosevelt appointed the Commission on International Exchange in 1903 to study the possibility of a gold standard for Mexico and China, Conant was among its members. Soon after, he published his *Principles of Money and Banking* in two volumes, which was, as *Bankers Magazine*, Vol. 72 (March 1906, p. 44) pointed out, "accepted by many critics as the standard work on this subject."

The currency committee of the New York Chamber of Commerce was heir to the methods and goals of the Indianapolis Monetary Commission, and was fully conscious of its honorable lineage. Indeed, early drafts of the committee's report referred to the "model plan" of the Commission of 1898. Its members understood that the proper order of business in matters of reform was to draw up an agenda on which public discussion could be focused, and, on that basis, to gather a broad constituency. Vanderlip thought the phrase "centering public Attention" was an agreeable way of describing the process (see [14;53; and 17, p. 22]). The committee's language was more formal:

> no important financial measure will receive favorable consideration in Congress unless it has the endorsement of representative bankers. Such being the case, we are of [the] opinion that the bankers of New York City ought to take up this question and reach an agreement upon some satisfactory measure.

Broad agreement among representative bankers from throughout the nation was immediately assured by meetings between the New York committee and the Currency Commission of the American Bankers Association. (The minutes of the meetings between the chamber committee and the ABA Currency Commission are appended to American Banker's Association *Proceedings 1907*, pp. 107-16).

By 1908, the measure upon which most bankers, merchants, industrialists, and reform-minded intellectuals had agreed was a central bank. Divisions among businessmen on this question that one could reasonable expect to mirror differences in geographic section, function, and size of capital virtually disappeared in the wake of the panic of 1907. As early as december 1907, for example, Vanderlip ([54] and cf. [50]) could report not only that "the sentiment is unquestionably growing in favor of a central bank," but that he found "many people in the West in favor of it." Significant divisions remained on the question of legislating an emergency currency, as the battle over the Aldrich-Vreeland Act in 1908 amply demonstrated. But after 1907, business opinion generally inclined to the view that the establishment of a central bank in some form was the key to reform.

From this standpoint, the problem of reform was a purely technical one that neither required nor properly admitted broadly political discussion and debate: it was a problem for "experts" to solve. Vanderlip made this clear in the conclusion of his lecture on "The Currency Problem" at Columbia University, in November 1907, p.18: "The subject is technical. Opinions formed without a grasp of fundamental principles and conditions are without value. The verdict of the uninformed majority gives no promise of being correct." Hence the formation of the National Monetary Commission under the provisions of the Aldrich-Vreeland Act was a critical success in the eyes of the movement for reform -- it was an important step towards removing the questions of banking and currency entirely from normal political discourse, where they had been since Reconstruction, and where, according to the US Constitution, they belonged. The National Monetary Commission (NMC) was perfectly suited to the movement's purposes, for while it retained the imprimatur of the federal government, it could -- and did -- function as a private, "extra-political" study group composed of experts from the largest banks and universities in the US and Europe ("My idea," Senator Aldrich told his counterpart in the House, "is, of course, that everything shall be done in the most quiet manner possible, and without any public announcement" [1]. (cf. [44, pp. 334-40.))

The NMC completed the theoretical justification of a central bank that was begun in earnest with the 1906 report of the New York Chamber of Commerce. It is safe to say that if an NMC volume was not a critical, historical study of the US banking system, it was an analysis of European central bank policy.

Those volumes that did treat the relationship between bank assets and bank note issue concentrated on the means by which an American discount market could be created and the problems of competitive investment, overproduction, and economic instability could thereby be solved.

The means to these ends was, of course, a government central bank. Only a central bank could provide an agency through which individual banks could rediscount their assets, replenish their reserves, and, if necessary, expand their note issues; at the same time, only a large central bank would have the power required to establish and enforce uniform criteria for acceptable commercial paper. A central bank and a genuine discount market would prevent the conversion of currency into capital and make American commercial paper a truly liquid asset. Thus, the currency would be made "elastic" and banking reserves would be made effective in crisis without granting small entrepreneurs easy access to capital. And the money and stock markets would be insulated from both seasonal shocks and competitive investment. An investment system already being organized around the large industrial corporations could be stabilized (see especially the essays by Warburg, Jacobs, and J. H. Hollander in Vol. 20 of the NMC publications, *Miscellaneous Articles* (Washington, 1910)).

The legislation finally proposed by the NMC -- or, to be more accurate, by Senator Aldrich's inner circle of banking experts -- did not become the Federal Reserve Act of 1913. But the differences between the Aldrich Plan and the several versions of a federal reserve association that emerged from Carter Glass's House Committee were not matters of principle. Moreover, the consensus of 1913 on what were important ends <u>and</u> means of financial legislation was the product of a long "campaign of education" initiated and led by the corporate-industrial business elite. Paul Warburg of Kuhn-Loeb & Company, who helped Frank Vanderlip and A. Piatt Andrew draft the Aldrich Plan, noted in July 1913 [58] that "both parties are thus in agreement as to the ends to be striven for; more than that, they are agreed even as to the technical means by which they must be attained." The origins of the Federal Reserve System are to be found, then, not in successive drafts of the bill that made it lawful, nor in some manifest external necessity upon which later analysts have bestowed trans-historical factuality, but in the ideological maturity and authority of what James B. Dill called "a new order of corporation men."

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