

HISTORY OF ECONOMIC CRISES IN U.S.A., UNDER THE NATIONAL BANKING SYSTEM, 1873 - 1907

By CLAUDE B. BANDALOUKAS

1. THE CRISIS OF 1873

During the four years immediately preceding the crisis of 1873, the general economic activity was greatly accelerated. For many commodities production facilities were provided far beyond the limits of profitable output. The most serious weakness in the economic structure was railroad building. Railroad bonds, sold at a discount, had provided means for building many lines far in advance of traffic needs. In 1870, two-thirds of the railroad mileage ultimately to be in New England was already in operation. Most of the new mileage after the Civil War grew from the competitive desire on the part of the existing railroads to secure greater bargaining power in respect to traffic. For example, in the 1870's Pennsylvania built its own line from Baltimore to Washington to avoid using the Baltimore & Ohio, and the Boston & Maine built from Portsmouth, N.H., to Portland, Me., rather than use a competitor's line⁽¹⁾. Subsequent events seem to indicate that the development in agriculture, in manufacturing industry and in transportation was far more rapid than was consistent with a healthy growth.

Banks may possibly be deemed responsible for the creation of crisis conditions if credit expansion has been unusually rapid in the years just before a crisis. The expansion of credit liabilities, caused by an increase in bank loans, may not be accompanied by a parallel increase in the cash reserves of the banks. This being so, the banks may be so weakened that, though able to withstand the shock of a crisis, may not be in a position to extend that aid to the business community which may be reasonably expected from them. However, the creation of unsound business conditions can not be attributed to the banks simply because of an increase in bank loans; not until the expansion of bank loans assu-

(1) Williamson, H. F., *The Growth of the American Economy*, pp. 521 and 525.

mes large proportions, or unless there is direct evidence of reckless banking methods. Neither of these qualifying conditions existed in this particular case, and it cannot be said that the banks were particularly at fault.

Prior to 1874 no distinction was made between deposit and note liability. Banks were required to hold the same kind of reserve against both. However, even during the worst moments of the 1873 crisis the liability for notes was not one which caused any depletion of reserves. Consequently, in this work, special emphasis is given to the relation between reserves and deposit liabilities.

In 1869 the banks had reserves amounting to 28% of deposits; in 1873 the reserves were 23%. It would seem, therefore, that the cash basis of the credit structure had not been seriously weakened. One factor, however, did tend to weaken the effectiveness of the aggregate reserve. This was the increase in the number of banks in the country; from 1619 in 1869 to 1968 in 1873. Each separate unit of reserve was less effective both for use and as a basis for public confidence. It should also be noted that the deposit of reserves with agents in the «redemption cities» had increased considerably, indicating greater power and the probability of drawing on these banks in case of unusual demand. Although the country banks and those in the reserve cities were well supplied with cash, many of the former and all of the latter possessed the right to withdraw sums from New York. Thus, the condition of the New York banks was the most important single factor to be considered in estimating the strength of the system as a whole.

In some respects the condition of the New York banks may have been considered quite as satisfactory as that of the other banks. The ratio of reserves to demand liabilities throughout the period was well above legal requirements. There was a distinct decline, however, in the proportion of legal tender notes to deposit liabilities, which is the most significant indication of the strength of the banks. (Mr. Sprague makes no comment on the adequacy of the «legal requirements», i.e., the matter of the pyramiding of reserves. A large part, or all, of a country bank's deposit in a reserve city bank may represent part of the reserve of the country bank against its own deposits. Of this reserve money, considered a deposit in the eyes of the reserve city bank, 25% will be regarded as a reserve and the remainder loaned out. Of the 25% thus held out as a reserve, only half had to be kept in the form of cash in the reserve city bank's vaults; the remainder could be kept on deposit in a central reserve city bank, i.e., in New York. The New York bank would,

in turn, need to hold only 25% of this deposit as a reserve. Thus, from an original reserve requirement of 25%, the actual reserve turns out to be about $7\frac{1}{2}\%$ (2).

During this period immediately preceding the 1873 crisis, fifteen of the fifty New York banks held practically all of the bankers' deposits in the city; and seven of these held between 70 and 80% of the total. The condition of these banks was such that they were in no position to meet considerable demands from their depositors without a drastic contradiction of their loans. In addition, it was evident during the years before the crisis was that the outside banks had a strong preference for reducing their balances with agents rather than their own cash reserves whenever their depositors came to them for even moderate supplies of money.

All of the above mentioned seven banks paid interest on their bankers' deposits. This led to two very undesirable consequences: First, it caused money to be sent to New York in larger quantities than would have been otherwise necessary. Secondly, it made these New York banks unable to maintain large reserves and at the same time realize a profit from the deposited funds. Bank loans regularly expanded with every increase in deposits from out of town.

A great many of the loans of the New York banks were in connection with stock exchange dealings. Call loans were favored, not only because of a heavy demand from that quarter, but also because their presumed liquidity was desirable. This considered liquidity, however, proved to be an extremely fickle element and just at the moment when it was most needed, i.e., in time of panic, it vanished (3).

In 1872 there was a slow but continuous increase in loans from April to August. In September it became necessary for the New York banks to recall a large amount of their loans, because of heavy withdrawals by the country banks for crop-marketing purposes. Interest rates were pushed up considerably, and there was strong pressure to sell on the stock exchange. Demoralization of the money market was threatened. The Government, realizing the urgency of the situation, came to the relief of the banks through the sale of gold and the purchase of bonds. The Bankers' Magazine of October, 1872 pointed out quite correctly that the New York banks «should have been prepared for the inevita-

(2) Reed, H. L., Money, Currency and Banking, p. 237.

(3) Myers M. G., The New York Money Market, p. 206.

ble autumnal reduction of balances belonging to their western correspondents by holding much larger reserves».

Early in 1873 there were large withdrawals of funds by the interior banks with a resulting contraction of loans in New York. By the end of April the usual return flow of money set in giving the New York banks an opportunity to exercise caution by setting up adequate reserves. The warning of recent experience went unheeded and loans were expanded as before. There had been some apprehension during the early months of 1873, but during the summer there was a general feeling that the situation was improving.

Beginning early in September, 1873, withdrawals from the New York banks were unusually large. On September 8th and 13th respectively, the New York Warehouse & Security Co. and Kenyon, Cox & Co. closed their doors. At the same time these failures seemed not to have been regarded as of far-reaching importance. In both cases the failures were closely related to the overextended financing of railroads. During the following week failures among the smaller brokerage firms continued at an increasing rate, climaxed by the closing of the Union Trust Co. and the National Bank of the Commonwealth. The failure of these two banks was attributed to the inability to get call loans paid in, or to realize or borrow on securities. By the end of the week the confusion and excitement had grown to such a pitch, that the Governing Committee of the stock exchange decided to close until further notice.

An important reason why the stock exchange was unable to remain open and an obstacle to opening it once it had been closed was the method used by the brokers to settle their transactions. Almost every broker had an arrangement with his bank by which he was allowed to overdraw his balance, in payment for blocks of stock, with the understanding that before three p.m. of the same day he would deposit the certified checks of other people to an amount sufficient for the redemption of his own checks and for the maintenance of a respectable balance. As the crisis grew, each bank, being afraid to accept the checks certified by other banks, refused to permit these overdrafts.

By the third week in September, several trust companies were forced to close. The reserves of these trust companies were principally held in the form of deposits with national banks in New York, and were heavily drawn on to meet demands on the trust companies. In some instances, withdrawals from the national banks, by individuals and correspondent banks, reached the proportions of a run. Many of the provincial banks also had dealings with New York brokers. Thus, failures and suspen-

sions of bankers and brokers weakened directly the country banks, to say nothing of the alarm which had been caused among their own depositors. This, of course, intensified their drawing on reserves in New York.

On September 20th (the date of the closing of the stock exchange) the New York Clearing Association set up a committee with the right to issue clearing-house loan certificates. These certificates could be used to settle balances between banks by those banks which were unable to meet unfavorable balances with cash payments. The loan certificates provided a means of payment other than cash, and also curbed the temptation of a single bank to seek to strengthen itself at the expense of the others, and so rendered each bank willing to assist the community with loans to the extent of its power. In addition, a «greenback pooling agreement», giving the Committee control over the currency portion of the reserves of the banks, made it possible to place the reserves of all the banks at the disposal of any threatened institution.

Despite this action by the Clearing-House Association, the banks in New York were clearly at the end of their resources by September 24th. The Association then adopted a resolution «that all checks, when certified by any bank, shall be first stamped or written. 'Payable through the Clearing House'». This, in effect, involved the partial suspension of cash payments by the banks, and placed the dwindling supply of currency more absolutely within the control of the clearing-house committee. The first consequence of the partial suspension was the appearance of a premium on currency in terms of certified checks. By the following day (September 25th), the premium was reported ranging from 1/2 to 3 1/2%.

By September 27th, a partial suspension had taken place throughout the country, except on the Pacific coast, where the banks were on a gold basis and where general business was largely independent of that in the rest of the country. Once the banks had resorted to suspension, many people stopped paying into the banks cash received in the course of their daily business. This was done by individuals not only to protect their cash position, but also to take advantage of the currency premium. By the middle of October, the New York banks were able to adopt the effective remedy of paying out money freely, with the result that, by the end of the month, normal relations between banks and depositors were almost completely restored. This pattern was followed throughout the country, so that cash payments were almost completely restored by early in November.

The level of business activity had not as yet been seriously disturbed. There was no further monetary panic during 1873 but, so far as ge-

neral business was concerned, the crisis had only begun. Toward the end of October, when suspension of payments had already taken place, news of curtailment of production became a subject of daily report in the newspapers. At that time the more permanent causes of business depression were beginning to make themselves felt, and it seems reasonable to conclude, that the temporary suspension of payments in 1873 had relatively little influence on the trade. After the beginning of November the crisis was determined by influences entirely outside the field of banking operations. The return flow of money to the banks, which began late in October, was accelerated by the depression in general business. On December 26, 1873 the Comptroller of the Currency reported reserves held by the banks greater than at any time since June, 1871.

An analysis of bank returns indicates that loans of about \$ 60,000,000 were contracted between September 12, 1873 and October 13th. of that year. Mr. Sprague maintains that this contraction was due to, and in turn contributed to, the severe financial strain of the crisis. He points to a further contraction of about \$ 30,000,000. in November 1st, as representing the diminishing requirements of business owing to the trade depression.

This and later crises seem to support the view that in an emergency call loans are less liquid than other classes of loans. In New York, call loans were reduced by only 7 ½ % by October 13th. while other loans had been curtailed by the same date by 12% . There are only two kinds of loans which can be regarded as liquid to any considerable measure during an emergency: i.e. those made to people engaged in the final stages of production of commodities which are required for individual consumption, and holdings of foreign bills. The latter were not held to any considerable extent by the banks. Liquidation of the former involves curtailment of production which is likely to make it necessary for producers at the earlier stages to increase loans on account of their inability to make expected sales.

The analysis of the bank returns supports the view that the New York banks were called to meet the emergency almost alone. Their ability to respond so well to the demands made upon them can be attributed entirely to their cooperation through the Clearing House Association; especially to their agreement for equalizing reserves. In consenting to this arrangement the conservatively managed banks exhibited praiseworthy willingness to act for the common good. Demands for money were almost wholly upon the banks which had accumulated bankers' deposits by the offer of interest, and which were at the same time

the greatest lenders on the stock exchange. The New York banks were, in effect, converted into a strong central bank. The aforementioned «praiseworthy willingness» may possibly have been, in certain instances, prompted by the threat of retaliatory action, but the effectiveness of the agreement cannot be questioned.

During the crisis the New York Clearing House appointed a special committee to consider reforms in banking methods. Mr. Sprague characterizes this committee's report as «the ablest document which has ever appeared in the course of our banking history». The report suggested several recommendations «as indispensable to the harmonious intercourse between banks bound together by common interests», among which were the following :

That payment of interest on deposits be prohibited.

That each bank carry at all times an amount of legal-tender notes equal to at least 15% of its liabilities.

That no bank certify a check as good until the full amount of it shall appear on its books from a deposit.

These recommendations, however, led to no immediate change in banking technique. The long session of Congress which followed the crisis was largely devoted to banking and currency problems, but with results of slight practical importance for the banking system. Reserve requirements were actually reduced by a bill which became law on June 10, 1874. The original bill provided that banks were not required to hold reserves against their circulation, but to offset this it was proposed that the banks be asked to hold the same proportion of reserves as formerly against deposits but that it should be held entirely in their own vaults. During the discussion of the bill, which contained many other features, this latter proposal was dropped, thus leaving the banks with a lower reserve requirement than before the crisis. According to M. G. Myers, popular demand after the 1873 crisis centered on an increase in the amount of money in circulation rather than on a reform of reserve requirements. The Act of 1874, requiring the reserve to be computed only against deposits, was for the purpose of releasing greenbacks. The effect of the action was to release about \$44,000,000 of greenbacks which temporarily put the banks in possession of excess reserves (4).

4. Myers, M. G., op cit., p. 237.

2. THE PANIC OF MAY, 1884

General economic activity was strong from 1879 to 1882. During much of 1883 and the early part of 1884, there was a slow but general decline in most branches of trade marked most sharply by a fall in prices of commodities and securities. The apparent strength of the banks was not weakened by these unfavorable business conditions. The banks, especially those in New York, improved their cash reserves, and the crop moving requirements of 1883 were met with little or none of the usual advance in rates on loans. During the winter and early spring of 1883-84 there was no appreciable contraction in the volume of loans or any advance in their rates. Consequently it seems reasonable to agree with Mr. Sprague in ascribing the continued fall in security values to causes other than banking.

Successive falls in prices on the stock exchange brought about the failure of a number of speculators. Within little more than a week, an astonishing series of instances of frauds and defalcations were brought to light. An outstanding case was that of the firm of Grant & Ward. It turned up assets of \$ 700,000 against liabilities of \$ 16,000,000. Tied in with this failure was that of the Marine National Bank whose president was a partner in Grant & Ward. The immediate cause of its failure was the illegal certification of a \$ 750,000. check of Grant & Ward.

These failures were the cause of a further considerable drop in the stock market. During the following week uneasiness increased and developed into panic when several brokerage and banking firms failed. Securities were sold wildly regardless of price. The banks took action through the clearinghouse similar to that of 1873, restoring considerable confidence in their ability to remain open. There were several scattered failures during the next few days, but by Friday, May 15 th., the market had substantially recovered.

The Commercial and Financial Chronicle attributed the causes of the panic to «a complete loss of confidence, not so much in the market prices of securities as in the stability and soundness of various institutions and firms. The difficulty of obtaining ready cash also contributed to intensify the troubles that had developped.»

The effectiveness of the use of clearing-house loan certificates, when issued at the beginning of a disturbance, was clearly indicated by the success of the New York banks in maintaining their position during the panic. One very favorable circumstance, however, was that the panic broke out in the spring, rather than in autumn, when crop moving

requirements would have confronted the banks with additional withdrawals. As it was, the customary inflow of funds from the interior was immediately reserved during the panic week.

The recommendations contained in the report of the special committee of the New York Clearing House in 1873 were again proposed. Again, no positive action was taken. The Comptroller of the Currency suggested certain reforms, including prohibition of over-certification and the creation of a stock-exchange clearing house, but was unable to get legislative action. No changes in banking practice or in legislation resulted.

3. FINANCIAL STRINGENCY IN 1890

The National Banking Act was modified by an act of March 3, 1887, to the extent of changing the designation of reserve and central reserve cities, on the basis of population: Thus 200,000 inhabitants were required for a central reserve city and 50,000 for a reserve city. Cities fulfilling the above population requirements could be re-classified, if three-fourths of the banks in the city accepted the change⁽⁵⁾. The only important change from this amendment was that Chicago and St. Louis were elected to become central reserve cities. The reserve structure of the banking system, however, was little changed; New York still held the bulk of the bankers' deposits, including large amounts from Chicago and St. Louis. Maintenance of cash payments by the New York banks was still indispensable if the dislocation of the domestic transactions were to be avoided.

Mr Sprague suggests that in this crisis the United States acted, at least to a greater extent than in the two crises discussed above, as a passive recipient of a disturbance originating in other parts of the world rather, than in the domestic economy. «It is probable that nothing more than the usual monetary stringency would have occurred in the autumn of 1890 had this country been able to escape from the effects of the collapse of the speculative movement in England which culminated in the Baring failure of November.» There was no accumulation of money in the banks of a decline in the demand for loans such as marked the previous periods of general business contraction and trade depression.

During 1889 and 1890 bankers' deposits in New York were considerably reduced. The country banks were able to find locally full employment for their funds and transferred to New York only the amount

(5) Reed, H. L., *op. cit.*, p. 236.

needed to meet their required reserves. This reduction in the amount of money in the New York banks seemed to call for a reduction in their volume of loans by an amount sufficient to offset this loss in reserves. In lieu of an adequate contraction, the banks adopted the policy of increasing the volume of their call loans relatively to the total of all loans. Whenever their reserves fell off, they resorted to call-loan contraction with the result that these became subject to increasingly violent fluctuations.

Despite smaller reserves and more frequent fluctuations in loan rates, the course of the security markets during the first half of 1890 was not unlike that in previous years. The cessation of the foreign demand for American securities, rather than any positively unfavorable development in this country, seems to have been the cause of a change in speculative feeling. Before the beginning of July, the sale of American securities in London became the controlling factor in the situation. The resulting exportation of gold reduced the New York banks' reserves below the amount it was prudent to maintain at the beginning of the crop-moving period. It is thought the banks could probably have prevented some of this outflow had they pursued a more conservative lending policy.

In August the Treasury gave some relief to the banks by offering to redeem \$ 20,000,000 of the 4 ½ % bonds with interest to maturity : August, 1891. Loan contraction was eased and quotations on the stock exchange regained some of their loss. The Treasury offered to take another \$ 20,000,000. on the same terms two days later. During the second week in September, the banks suffered further heavy losses of reserves which prompted severe loan contraction. The fall in security prices was even greater than in August. The Treasury again came to the aid of the banks by redeeming \$ 17,000,000. bonds at prices ranging from 125 to 126 ¾. Practically all the money thus paid out went to the banks, causing a large increase in reserves. On the basis of these reserves loans were again expanded and easy monetary conditions were restored. Again in October reserves were low but pressure on borrowers was not carried to the extremes which had characterized August and September.

Until the second week in November there had been no important failures, banking or mercantile. However, quotations on the exchange were so low that any further decline could hardly have failed to bring about extensive failures. The immediate cause of this decline was a feeling of apprehension and alarm over the Bank of England raising its discount rate from 5 to 6 % . Prompt action by the clearing-house au-

thorities did much to prevent the spread of panic. The issue of loan certificates was authorized but no provision was made for equalizing reserves as in 1873.

Treasury assistance afforded to the money market became a much discussed subject. It was widely believed that a Treasury surplus was a desirable means of safeguarding the credit structure of the country. Mr. Sprague ably points out that it is a far cry from the fact that a supply of money, whatever its source, is of greatest relief in an emergency, to the conclusion that the government rather than the banks is the instrument which should provide this resource.

4. THE CRISIS OF 1893

Between June, 1890, and June, 1893, approximately \$ 170,000,000. was added to the money supply of the country. This increase was achieved through silver purchases, excess Treasury payments, additional note issues by the banks, and gold movements. However undesirable this may seem from a monetary point of view, there was no reason why the banks should have found themselves at the beginning of the crisis inadequately supplied with cash reserves. An analysis of the bank statements shows that, taking the country as a whole, there was no greater increase in loans than during many other periods of active business in American history. However, it became evident during the crisis that the banks had been carrying a large amount of loans which should have been written off long since, or at least written down. During 1892, the low rates for loans indicates that the banks would have been glad to lend much more than the demand of borrowers made possible. The situation was in marked contrast to the months preceding other crises, when every available credit resources at the money centers had been stretched to the extreme limits of safety and even beyond.

The first stage of the crisis was brought about by the failure of the Philadelphia and Reading Railroad on February 26, 1893. This company had ventured into enterprises far beyond its available capital—and far outside the scope of transportation. The failure gave rise to some apprehension as to the condition of other companies and resulted in a downward trend on the stockmarket throughout March and April. The contraction of bank loans was accompanied by high call loan rates and contributed to this downward trend. This contradiction caused some losses, especially to holders of the more speculative types of securities. As put by the Commercial and Financial Chronicle, «those (houses)

that were compelled to suspend were more or less loaded up with the stocks of those companies which proved to be the bane of the market.»

The loan contraction mentioned above was primarily in New York and three or four other large cities. For the country as a whole there was a net credit expansion of about \$ 27,000,000. Indications are that the influence of the currency situation on the course of events up to this time was extremely slight. There is no evidence of any general distrust of the banks during this first stage of the crisis. The balance of trade was in favor of New York, as opposed to the rest of the country, with the result that the New York banks were in a much stronger position in May than in March.

The second stage of the crisis, beginning at the end of May, 1893, found the New York banks in a very favorable reserve position; much stronger, as a matter of fact, than at the same time the year before. But during the three weeks ending June 17th. the net movement of money between New York and the interior banks was reversed and the reserves of the New York banks fell considerably. The cause of this reversal is thought to have been the failure of a number of state and national banks in the West and South. The Comptroller of the Currency attributed the cause of these failures to «violations of law and imprudent methods of banking.» He added, «...the closing of these banks was only hastened by the general condition of financial affairs.» There were approximately 3, 400 mercantile failures between January and July, 1893, and it is inevitable that many banks should have gone down with them. Frequently banks were forced to suspend temporarily because of the distrust excited by the failure of banks in their neighborhood.

Although none of the New York banks was in difficulty, the machinery for the issue of clearinghouse loan certificates was set up. By 1907 the tradition seems to have been established that the issue of these loan certificates and the suspension of cash payments were virtually one and the same thing. This was not so at this time ; there is no evidence that suspension was immediately resorted to by the banks or that cash suspension was associated in the minds of the people with the issue of clearing-house loan certificates. During this second stage then, there was no serious disturbance in New York, but the reserves of the banks there were considerably reduced by the withdrawal of money by banking depositors in the West and South.

Toward the end of July a feeling of distrust spread over the West and South. Many banks suspended cash payments and there were scattered failures. Withdrawals from New York were resumed. Early in the

following week there were bank failures in many of the large cities, and the Erie Railroad went into the hands of receivers. The stock exchange suffered the worst decline of the year. Suddenly and unexpectedly the banks through out the country, beginning with those in New York, partially suspended cash payments. Although the number of bank failures was no greater than those which had occurred during the two worst weeks in June, there were a greater number of prominent city institutions involved and the number of suspensions was considerably greater.

Once a suspension began, the ensuing situation necessitated a more complete suspension. Currency went to a premium and money was withheld by many depositors in order to secure a profit from its sale. The premium maintained itself for thirty days in 1893 with rates reaching a maximum of 5 o/o.

In earlier crises, reserves were restored by the natural return flow of money from the interior banks. In 1893, reserves were restored by enormous gold imports. The decline on the stock exchange encouraged foreign purchases of American securities in large quantities, confidence in their ultimate value being based in part on the expectation of the repeal of the silver-purchase law. After the out-break of the crisis, it became clear that the silver issues were a seriously disturbing factor. The difficulty of the Treasury in maintaining the gold standard was vastly increased, and the suspension of gold payments was imminent. Thus, importation of gold from Europe during the crisis was of great importance, the banks in New York being able to replace their shipments to the interior from this source.

Perhaps the most striking feature of this crisis was the contraction of loans. From May 4th to October 4th contraction amounted to about 15% of loans outstanding in the earlier date. This compares with only a 5% contraction during the crisis of 1873. It reflects in part the inevitable decline in business dealings which would have taken place sooner or later, quite apart from banking and monetary causes. It is certain, however, that the banks in many parts of the country caused needless damage to their customers by a ruthless policy of loan contraction. After the beginning of September the development of the crisis was no longer a banking affair. As usual, when general trade depression sets in, the banks soon found themselves with an abundant supply of funds and in a position to lend far beyond the requirements of borrowers. The 1893 crisis inaugurated three and a half years of business depression.

The turning point came in the latter part of 1896, when a number of favorable events paved the way for a business recovery (6).

The experience derived from this crisis led to no changes whatever in banking methods or in legislation. One particular adverse after-effect of the crisis was the establishment of the view that the issue of clearing-house loan certificates inevitably and immediately involves suspension and the currency premium. Although there seem to be no real grounds for this belief, it played an important role in later crises, especially that of 1907.

(6) Williamson, H. F., op. cit., pp. 756 - 57.