Volume Title: The Great Contraction, 1929–33

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Volume Publisher: Princeton University Press

Volume ISBN: 0-691-00350-5

Volume URL: http://www.nber.org/books/frie65-1

Publication Date: 1965

Chapter Title: Bank Failures

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Chapter URL: http://www.nber.org/chapters/c9276

Chapter pages in book: (p. 55 - 63)

3. *Bank Failures*

The preceding account gives a prominent place in the sequence of events during the contraction to the successive waves of bank failures. Three questions about those failures deserve further attention: Why were the bank failures important? What was the origin of the bank failures? What was the attitude of the Federal Reserve System toward the bank failures?

ROLE OF BANK FAILURES

The bank failures had two different aspects. First, they involved capital losses to both their owners and their depositors, just as the failure of any other group of business enterprises involved losses to their owners and creditors. Second, given the policy followed by the Reserve System, the failures were the mechanism through which a drastic decline was produced in the stock of money. Which aspect was the more important for the course of business?

For the United States, the two aspects were so closely related that it may seem impossible to distinguish them and to judge their separate effects. But even for the United States alone, a few figures serve to show that the second was vastly more important than the first. Regarded solely in their first aspect, the failures imposed losses totaling about $2.5 billion on stockholders, depositors and other creditors of the more than 9,000 banks that suspended operations during the four years from 1930 through 1933. Slightly more than half the loss fell on depositors, the rest on other creditors and stockholders.[61] A loss of $2.5 billion is certainly sizable, yet by itself it would not entitle bank failures to the amount of attention we and other students of the period have devoted to them. By comparison, over the same four years, the value of all preferred and common stock in all enterprises in the United States is estimated to have declined by $85 billion. Or, to make a different comparison, the decline in the total value of all shares listed on the New York Stock Exchange in October 1929 is estimated to have been nearly $15½ billion.[62] As a fraction of total wealth, the losses produced by bank failures were minor and would deserve no more attention than losses of a comparable amount in, say, real estate.

[61] Loss to depositors, estimated at $1.3 billion (unpublished FDIC estimates: see source notes to Table 16, part II); loss to other creditors is a rough guess; loss to stockholders, estimated at $0.9 billion (*Federal Reserve Bulletin*, Sept. 1937, p. 897). A sizable fraction of the losses was not realized until after the end of the banking holiday. Of the more than 9,000 banks that suspended in the years from 1930 through 1933, more than 3,500 suspended after Mar. 15, 1933.

[62] *Historical Statistics of the United States, Colonial Times to 1957*, Bureau of the Census, 1960, Series F-175, p. 150; *Business Statistics*, 1932 Supplement, p. 104.

In the second aspect, the situation is entirely different. The total stock of money fell by over one-third from 1929 to 1933; commercial bank deposits fell by over 42 per cent; in absolute amount, they fell $18 billion. Total deposits in suspended banks alone were much larger than losses, close to $7 billion in the same four years. If the bank failures deserve special attention, it is clearly because they were the mechanism through which the drastic decline in the stock of money was produced, and because the stock of money plays an important role in economic developments. The bank failures were important not primarily in their own right, but because of their indirect effect. If they had occurred to precisely the same extent without producing a drastic decline in the stock of money, they would have been notable but not crucial. If they had not occurred, but a correspondingly sharp decline had been produced in the stock of money by some other means, the contraction would have been at least equally severe and probably even more so.

Persuasive evidence for this final statement is provided by Canadian experience. Canada had no bank failures at all during the depression; its 10 banks with 3,000-odd branches throughout the country did not even experience any runs, although, presumably as a preventive measure, an eleventh chartered bank with a small number of branches was merged with a larger bank in May 1931. But because Canada kept its exchange rate with the United States fixed until Britain left the gold standard in September 1931 and then maintained its exchange rate at a new level involving a smaller depreciation than that undergone by the pound sterling, its internal level of income and its stock of money had to adjust to maintain external equilibrium. Though the required fall in both prices and income was sharp, the depreciation of the Canadian exchange rate permitted the percentage fall to be somewhat smaller than that in the United States. The stock of money fell sharply also, but by a much smaller percentage than in the United States. Even the smaller fall was, however, nearly one and a half times as large as the fall in any contraction in U.S. history since the Civil War except only the 1929–33 contraction. So it can hardly be regarded as minor. The relevant figures are as follows:[63]

Percentage Decline, 1929–33	*United States*	*Canada*
Stock of money	33	13
Net national product	53	49
Velocity	29	41

[63] Except for the Canadian currency component, which is an uncentered annual average of monthly data, money stock figures are annual averages of monthly data, centered on June 30. Canadian data are sums of demand, notice, and provincial government deposits in chartered banks, minus duplications (*Canada Gazette*, Dominion of Canada, Jan. 1929–Jan. 1934), plus currency held by the public (*Canada Year Book*, 1947, Dominion Bureau of Statistics, p. 1023). Net national income at factor cost, for Canada, from *Canadian Statistical Review*, 1953 Supplement, Dominion Bureau of Statistics, p. 15.

Why was the decline in the stock of money so much sharper in the United States relative to the decline in income than it was in Canada? Or, alternatively, why did not the stock of money in Canada have to fall much more sharply than it did to be consistent with so sharp a decline in income? The reason for the difference is, we believe, primarily the effect of the U.S. bank failures themselves. The bank failures made deposits a much less satisfactory form in which to hold assets than they had been before in the United States or than they remained in Canada. That, of course, is the reason they produced such a shift in the deposit-currency ratio in the United States. While currency was an alternative, it was not a fully satisfactory alternative, otherwise deposits would never have constituted so large a fraction of the total stock of money. Hence the demand for the sum of deposits and currency was reduced by the diminished attractiveness of deposits—an effect of the bank failures not heretofore considered. Of course, that effect was not strong enough to offset completely the increased demand for money relative to income as a result of the other factors associated with the contraction, such as the great increase in uncertainty, the decline in attractiveness of equities and real goods, and so on (see Chapter 12). If it had been, the amount of money would have fallen by a larger percentage than income fell, i.e., velocity would have risen rather than have fallen as it did. But the effect was strong enough to make the decline in velocity decidedly smaller in the United States than in Canada, where the same effect was not present. In Canada, deposits remained as attractive as they had ever been, and there was accordingly no reduction in the demand for money from this source. The other factors increasing the demand for money had full scope.

Paradoxically, therefore, the bank failures, by their effect on the demand for money, offset some of the harm they did by their effect on the supply of money. That is why we say that, if the same reduction in the stock of money had been produced in some other way, it would probably have involved an even larger fall in income than the catastrophic fall that did occur.

ORIGIN OF BANK FAILURES

The issue that has perhaps received the most attention centers on the reasons for the bank failures. Did they arise primarily from the financial practices of the preceding years? Or were they produced by the developments of the early thirties? Even if the first view were correct, the indirect monetary consequences of the failures are separable from the failures as such and need not have been also the near-inevitable consequences of the developments of the twenties. As we have just seen, it was the indirect consequences that were the most important effect of the bank failures.

As noted in Chapter 6, there is some evidence that the quality of loans and investments made by individuals, banks, and other financial institutions deteriorated in the late twenties relative to the early twenties in the ex ante sense that, had the later loans and investments been subject to the same economic environment as the earlier ones, they would have displayed a higher ratio of losses through default. The evidence for such deterioration is fully satisfactory only for foreign lending. For the rest, the studies made have not satisfactorily separated, and some have not even recognized, the difference between the ex ante deterioration, in the sense just specified, and the ex post deterioration that occurred because the loans and investments came to fruition and had to be repaid in the midst of a major depression. Loans and investments, identical in every respect except the year made, would have fared worse if made in the later than if made in the earlier twenties. By their concentration on ex post experience, authors of most of the studies unquestionably exaggerate whatever difference in ex ante quality there was. Indeed, many of the results are consistent with no deterioration at all in ex ante quality.

If the evidence is unsatisfactory for loans and investments in general, it is even sparser and more unsatisfactory for the loans and investments of commercial banks in particular. And there is some reason to believe that the experience of banks may have been different from that of other lenders. During the later years of the twenties, particularly in 1928 and 1929, banks were under steady reserve pressure. As we have seen, their total deposits were roughly constant from early 1928 to after the cyclical peak in August 1929. Whatever they might have done in the generally optimistic and exuberant environment of the time if they had been more plentifully supplied with reserves, they had no choice but to be highly selective in their loans and investments.

If there was any deterioration at all in the ex ante quality of loans and investments of banks, it must have been minor, to judge from the slowness with which it manifested itself. As we have seen, the contraction in business during the first fourteen months from the peak in August 1929 to October 1930 and particularly during the twelve months after the stock market crash was extremely severe. One reason may have been that banks were being forced to contract by a reduction in high-powered money, so that their deposits fell by 2 per cent in the course of the fourteen months. Yet, in that fourteen-month period, deposits in banks that suspended operations were only one-fifth to one-third higher than they were in the fourteen months beginning with either the cyclical peak of May 1923 or of October 1926: the amounts are $263 million for 1923–24, $281 million for 1926–27, and $347 million for 1929–30. In both earlier contractions, the decline in general economic activity, and hence the pressure on borrowers, was milder than from 1929 to 1930;

and, in addition, deposits in commercial banks rose by 5 to 6 per cent rather than falling as they did from 1929 to 1930.

The great surge in bank failures that characterized the first banking crisis after October 1930 may possibly have resulted from poor loans and investments made in the twenties. After the failure of the Bank of United States in December 1930, Governor Harrison told his board of directors that "the Reserve Bank had been working for a year or more to improve conditions in the Bank of United States, although there was no evidence that the condition of the bank was impaired," and J. H. Case, chairman of the board, said the bank's condition was probably not satisfactory in July 1929.[64] However, the subsequent pay-out record during the liquidation of the Bank of United States suggests that, if there was any permanent impairment of assets at the time the bank failed, it could not have been great.

Whatever may have been true of the initial bank failures in the first banking crisis, any ex ante deterioration in the quality of loans and investments in the later twenties or simply the acquisition of low-quality loans and investments in that period, even if no different in quality than in earlier periods, was a minor factor in the subsequent bank failures. As we have seen, the banking system as a whole was in a position to meet the demands of depositors for currency only by a multiple contraction of deposits, hence of assets. Under such circumstances, any runs on banks for whatever reason became to some extent self-justifying, whatever the quality of assets held by banks. Banks had to dump their assets on the market, which inevitably forced a decline in the market value of those assets and hence of the remaining assets they held. The impairment in the market value of assets held by banks, particularly in their bond portfolios, was the most important source of impairment of capital leading to bank suspensions, rather than the default of specific loans or of specific bond issues.[65] As W. R. Burgess, at the time a deputy governor of the

[64] Harrison, Notes, Vol. I, Dec. 18, 1930.

[65] The president of Federation Bank and Trust Company, closed by the New York State Superintendent of Banks on Oct. 30, 1931, explained that the bank had prospered for many years "and as a matter of fact right up to the past few months, when due to the nationwide rapid and unforeseen depreciation in bonds and other securities, the falling away in values of the bonds and securities owned by the company impaired the bank's capital structure" (*Commercial and Financial Chronicle*, Nov. 7, 1931, p. 3038).

In his contemporary account of the American banking system, R. W. Goldsmith wrote: "The depression of bond values, which started as far back as 1929 in the field of urban real estate bonds and reached foreign bonds and land bank bonds in the course of 1931, began to endanger the whole banking structure and notably the large city banks the moment first-grade bonds were affected in a most drastic way: From the middle of 1931 to the middle of 1932, railroad bonds lost nearly 36 per cent of their market value, public utility bonds 27 per cent, industrial bonds 22 per cent, foreign bonds 45 per cent, and even United States Government securities 10 per cent" (R. W. Goldschmidt [Goldsmith], *The Changing Structure*

New York Reserve Bank, told the Bank's board of directors in February 1931, the chief problem confronting many banks was the severe depreciation in their bond accounts; "given a better bond market and rising bond prices. . . . the condition of banks now jeopardized by depreciation in their bond accounts would, in many cases, improve automatically beyond the point of immediate danger."[86] Because there was an active market for bonds and continuous quotation of their prices, a bank's capital was more likely to be impaired, in the judgment of bank examiners, when it held bonds that were expected to be and were honored in full when due than when it held bonds for which there was no good market and few quotations. So long as the latter did not come due, they were likely to be carried on the books at face value; only actual defaults or postponements of payment would reduce the examiners' evaluation. Paradoxically, therefore, assets regarded by the banks as particularly liquid and as providing them with a secondary reserve turned out to offer the most serious threat to their solvency.

The most extreme example of the process we have been describing is the experience after Britain left the gold standard. The decline of 10 per cent in the price of government bonds and of 20 per cent in the price of high-grade corporate bonds (noted in the preliminary memorandum for the January 11, 1932, meeting of the Open Market Policy Conference, cited earlier) clearly did not reflect any deterioration in the quality of credit in the twenties or "bad" banking in any meaningful sense of the term. It reflected the inevitable effect of the enforced dumping of bonds by banks to reduce the volume of their assets by a large multiple of the amount of additional currency supplied to depositors.

If deterioration of credit quality or bad banking was the trigger, which it may to some extent have been, the damaging bullet it discharged was the inability of the banking system to acquire additional high-powered money to meet the resulting demands of depositors for currency, without a multiple contraction of deposits. That inability was responsible alike for the extent and importance of bank failures and for the indirect effect bank failures had on the stock of money. In the absence of the provision of additional high-powered money, banks that suffered runs as a result

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of American Banking, London, Routledge, 1933, p. 106). We are indebted to Manuel Gottlieb for this reference.

Commenting on bank suspensions in 1932, Bray Hammond wrote: "The situation had worked to the point where the stronger banks were being dragged down by the weaker banks, partly because the latter drew on the former for reserves and partly because the forced liquidation of portfolios by banks in difficulties impaired the value of portfolios of all other banks" ("Historical Introduction," *Banking Studies*, Board of Governors of the Federal Reserve System, 1941, p. 29).

[86] Harrison, Notes, Vol. I, Feb. 26, 1931. See also footnote 12, above.

of the initial failure of "bad" banks would not have been helped by holding solely U.S. government securities in addition to required reserves. If the composition of their assets did not stop the runs simply by its effect on depositors' confidence, the banks would still have had to dump their government securities on the market to acquire needed high-powered money, and many would have failed.[67] Alternatively, the composition of assets held by banks would hardly have mattered if additional high-powered money had been made available from whatever source to meet the demands of depositors for currency without requiring a multiple contraction of deposits and assets. The trigger would have discharged only a blank cartridge. The banks would have been under no necessity to dump their assets. There would have been no major decline in the market prices of the assets and no impairment in the capital accounts of banks. The failure of a few bad banks would not have caused the insolvency of many other banks any more than during the twenties when a large number of banks failed. And even if an abnormally large number of banks had failed because they were bad, imposing losses on depositors, other creditors, and stockholders, comparable to those actually imposed, that would have been only a regrettable occurrence and not a catastrophe if it had not been accompanied by a major decline in the stock of money.

FEDERAL RESERVE SYSTEM'S ATTITUDE

The failure of the Bank of United States provoked much soul searching by the directors of the New York Reserve Bank. They devoted meeting after meeting from mid-December 1930 to April 1931 to discussions of the responsibilities of the Reserve Bank with respect to member bank suspensions and of the actions it could take to prevent them. They were well aware of the serious shock the failures had administered to confidence not only in commercial banks but also in the Federal Reserve System. Owen D. Young, then deputy chairman of the board of directors of the New York Bank, repeated to his fellow directors the remark of an upstate New York banker that the failure of the Bank of United States "had shaken confidence in the Federal Reserve System more than any other occurrence in recent years."[68] At the first joint meeting of the Federal Reserve Board and the Open Market Policy Conference after the banking difficulties had developed, Adolph Miller, a member of the Board, commented that "the banking situation was now more important than the credit situa-

[67] Of course, had banks held only U.S. government securities in addition to their required reserves, the Reserve System would have been under much greater pressure than it was to intervene by providing additional high-powered money to support the prices of those securities. But that is an aspect of the problem wholly different from the effect of the possible deterioration of credit quality.

[68] Harrison, Notes, Vol. II, Aug. 13, 1931.

tion, and asked what the governors were planning to do in different districts if further banking trouble started."[69] The minutes of directors' meetings of the New York Bank and memoranda prepared for meetings of the Open Market Policy Conference reveal that the technical personnel of the Bank and the Board were fully aware of the interconnection between the banking and the credit situations, and of the effects of the liquidation of securities to meet the demands of depositors.[70] Repeatedly during the next two years, the problem of bank failures and bank supervision was discussed at meetings within the System.

Despite the attention to the problem after 1930, the only System actions directed specifically at the problem of bank failures were the proposals noted above for measures that others might take, with particular emphasis on proposals designed to permit assets to be valued more liberally in bank examinations. The general tenor of System comments, both inside and out, was defensive, stressing that bank failures were a problem of bank management which was not the System's responsibility.

The major reason the System was so belated in showing concern about bank failures and so inactive in responding to them was undoubtedly limited understanding of the connection between bank failures, runs on banks, contraction of deposits, and weakness of the bond markets—connections we have tried to spell out earlier in this chapter. The technical personnel of the New York Bank understood these connections, as undoubtedly many other individuals in the System did also; but most of the governors of the Banks, members of the Board, and other administrative officials of the System did not. They tended to regard bank failures as regrettable consequences of bad management and bad banking practices, or as inevitable reactions to prior speculative excesses, or as a consequence but hardly a cause of the financial and economic collapse in process. As implied in Miller's comment quoted above, they regarded the banking situation as something different from the credit situation.

Four additional circumstances may help to explain the System's failure both to develop concern over bank closings at an earlier date and to undertake more positive measures when concern did develop. (1) Federal Reserve officials had no feeling of responsibility for nonmember banks. In 1921-29 and the first ten months of 1930, most failed banks were nonmembers, and nonmembers held a high percentage of the deposits involved. (2) The failures for that period were concentrated among smaller banks and, since the most influential figures in the System were big-city bankers who deplored the existence of smaller banks, their disappearance may have been viewed with complacency. (3) Even in November and December 1930, when the number of failures increased sharply, over 80

[69] Harrison, Open Market, Vol. II, minutes of meeting, Jan. 21, 1931, p. 7.
[70] See, for example, quotations in footnote 12, above.

per cent were nonmembers. (4) The relatively few large member banks that failed at the end of 1930 were regarded by many Reserve officials as unfortunate cases of bad management and therefore not subject to correction by central bank action.[71]

In September 1931, when Governor Harrison convened a meeting of commercial bankers to discuss means of making deposits in closed banks available, he recalled that "at one time it was the feeling of many of us down town that the effects of the failure of . . . small banks in the community could be isolated," but "it was clear that the continued closing of institutions in the city is now having serious repercussions. . . ."[72]

4. *International Character of the Contraction*

In 1929, most countries of the Western world had returned to a monetary standard involving fixed exchange rates between different national currencies. The standard was widely known as the gold-exchange standard because many countries kept their monetary reserves in the form of balances of other currencies convertible into gold at fixed prices, notably sterling and dollars, rather than in the form of gold itself. Official agencies in such countries, usually the central banks, often fixed exchange rates directly by standing ready to buy or sell the national currency at fixed rates in terms of other currencies, rather than indirectly by standing ready to buy or sell gold at fixed prices in terms of the national currency.

Since the gold-exchange standard, like the gold standard, involved fixed exchange rates, it also meant that, so long as the standard was maintained, prices and incomes in different countries were intimately connected. They had to behave so as to preserve a rough equilibrium in the balance of payments among the countries. The use of the gold-exchange standard did mean, however, that there was less leeway in the adjustments among countries—the rough equilibrium could not be quite so rough as under the full gold standard. The gold-exchange standard rendered the international financial system more vulnerable to disturbances for the same reason that the rise in the deposit-reserve ratio rendered the domestic monetary system more vulnerable: because it raised the ratio of claims on the relevant high-powered money—in this case, ultimately, gold—to the amount of high-powered money available to meet those claims.

The links forged by the fixed rates of exchange ensured a worldwide decline in income and prices after 1929, just as the links forged by the less rigidly fixed exchange rates in 1920 ensured a worldwide decline then. No major contraction involving a substantial fall in prices could develop in any one country without those links enforcing its trans-

[71] We are indebted to Clark Warburton for this paragraph.
[72] Harrison, Office, Vol. II, Sept. 11, 1931.