

Runs on Banks and the Lessons of the Great Depression

By Charles W. Calomiris

Withdrawals of deposits from banks, especially large and rapid withdrawals that may place many banks in distress and potentially force their unwarranted closure, are typically

seen as economic nightmares. Such phenomena seem to demonstrate the need for government action to remove the incentive for depositors to withdraw from banks (as deposit insurance does) or to help banks avoid the consequences of depositor withdrawals (through assistance from the Fed). Destructive bank runs are blamed either on irrational behavior by depositors (pure panic) or on rational depositor concerns under imperfect information. In the latter case, an information externality underlies market failure. If banks follow a first-come first-served rule in paying out depositor claims, and if the quality of bank assets is not observable to depositors, then depositors who observe problems in the market as a whole (but who are unable to discern the quality of individual banks) face a strong incentive to withdraw, even from banks that are (unobservably) solvent. That behavior can itself cause otherwise solvent banks to fail and produce chaos in the payment system and in credit markets, with significant adverse consequences for firms and consumers.

But there is another view of deposit withdrawals, one that emphasizes their value as a means of imposing discipline on banks. Indeed, Charles Kahn and I have argued

that the first-come first-served rule followed by banks itself may have been designed as a means of placing bankers under greater discipline than officers of other firms. The temptation to misallocate funds is greater in banks than in other firms because bankers are given great discretion over how to allocate depositors' funds and because bankers' decisions are costly to monitor. The first-come first-served rule ensures that depositors are not treated equally as a class—those who are first to notice a problem receive a reward for doing so. To reward monitoring in this way can be efficient because it makes monitoring credible, which in turn makes the banker's behavior more reliable, which in turn makes it easier for depositors to entrust their funds to banks. The threat of runs on banks, according to this view, causes bankers to make better portfolio choices *ex ante*. And when runs actually occur bankers are removed from positions of control over bank assets, which prevents bankers' absconding *ex post*. Runs, according to this perspective,

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are the unavoidable consequence of an efficient arrangement that keeps bankers honest and makes bank investments more productive.

These two views are not mutually exclusive. It may be that runs on individual banks (one at a time, prompted by the concerns of the informed depositors of a particular bank) are desirable, but that runs on banks as a whole (prompted by the effect of bad macroeconomic news on uninformed depositors) are undesirable. From that perspective, it is possible to argue that runs foster both discipline and chaos. Lest the costs of chaos be overstated, it is important to recognize how private institutions mitigated the costs of aggregate runs before the enactment of federal deposit insurance in the 1930s. The formation of private bank-clearing houses and other bank coalitions for mutual protection helped healthy banks to share risk and buttress each other during difficult times.

Pre-Depression Insurance Coalitions

the operation of these coalitions, particularly in the United States, was not perfect. In the United States, restrictions on branching and consolidation created a system of thousands of undiversified and geographically dispersed banks. That heightened the need for effective coalitions to prevent panics, but ironically also made it much more difficult to form such coalitions. The increased need for mutual protection in the United States followed from the lack of bank diversification, which raised bank asset risk and thereby increased the vulnerability of U.S. banks to the threat of runs. The ability to cooperate was impaired, however, by the fragmented system of banks. To form effective coalitions banks must be able to establish and enforce rules that limit free riding on collective protection. Enforcement requires monitoring among members. Individual members' incentives to monitor are dulled when the number of coalition members is large (i.e., when the benefits of monitoring are shared, but its costs are borne individually) and when members are scattered over a large area (which raises the cost of monitoring). The United States, therefore, was unnecessarily vulnerable to systemic problems resulting from moments of confusion about the incidence of losses within the banking sector.

Nevertheless, even under circumstances in which coalitions of banks were unable to share risk and thereby discourage runs, the failure to prevent panics did not spell disaster. When collective action was inadequate the resulting banking panics did not produce massive bank failure; rather, banks limited convertibility of deposits into cash in the wake of large sudden deposit withdrawals. In essence, during times when information about individual banks was poor and all banks were experiencing withdrawals, the authorities insulated

banks (and society as a whole) from the costs of bank closures by temporarily releasing banks from the legal obligation to pay cash to all depositors. All of this is not to say that bank runs were costless, but rather that the financial system developed means of substantially mitigating the costs of aggregate runs.

A New View of the Depression

it was the great depression and the unprecedented upheaval felt in the banking sector during the early 1930s that brought massive government protection to banks in the form of the Reconstruction Finance Corporation (which made loans to banks and invested in banks' preferred stock issues) and the Federal Deposit Insurance Corporation (which insured some bank deposits). Friedman and Schwartz famously argued that unlike previous banking crises, the institutional response to the panics of the Great Depression was inadequate. The founding of the Fed, in their view, placed the burden of institutional response on the Fed rather than on private banks' decisions to coinure one another against withdrawals or to suspend convertibility. According to Friedman and Schwartz, the Fed

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did not act as it should have to stem the protracted outflow of deposits from the banking system. The Fed's failure to inject liquidity into the banking system made the panics of the Depression more severe than previous panics. That failure to deal with aggregate banking panics set the stage for new government intervention to solve the information externality problem of bank panics.

But new research suggests that the standard interpretation of banking collapse and government intervention during the Depression needs fundamental revision in four respects. First, recent research suggests that the banking crises of the 1930s for the most part were not the result of depositor confusion and information externalities but rather resulted from observable bank weakness. Second, new research also suggests that withdrawals of bank deposits often targeted observably weak banks and operated as an effective means of depositor discipline. Third, the conventional view that private coalitions were unwilling or unable to act effectively to insulate solvent banks from the threat of unwarranted runs has also been qualified by evidence of successful collective action in the most famous case of an identifiable panic—the run on

Chicago banks in June 1932. Fourth, studies of the political economy of the passage of deposit insurance suggest that its passage did not reflect a consensus in favor of deposit insurance on economic grounds. Federal deposit insurance was the result of congressional logrolling by its advocates, who saw in federal deposit insurance a means

clearest and most famous case of an asymmetric-information banking panic during the Great Depression—the June 1932 Chicago panic. The panic was confined to Chicago and clearly traceable to local shocks to the value of bank assets. Widespread withdrawals on city banks (from both *ex post* solvent and *ex post* insolvent banks) occurred for several days and several banks failed during the panic. In our paper, we asked whether any healthy banks failed during the panic. To address that question we divided the sample of Chicago banks into three categories: those that survived through mid 1932, those that failed during the panic, and those that failed outside the panic window. We asked whether the banks that failed during the panic shared *ex ante* characteristics with those that failed at other

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of protecting small risky banks at the expense of healthier large banks. Together these four sets of findings imply a dramatic rewriting of the record of banking instability during the 1930s and its policy implications.

Causes of Failures Elmus Wicker argues that bank failures during the early 1930s were largely (though not entirely) a continuation of the process of agricultural decline that had produced a wave of agricultural bank failures during the 1920s. Eugene White shows that the determinants of bank failure during the 1920s are quite similar to the determinants of failure in 1930. The notion that banks were failing because of fundamental, observable losses, and that failures stretched over many years suggests a much smaller role for asymmetric information or bank panic in understanding bank failures during the 1930s.

Selective Market Discipline In two of my papers—one studying Chicago banks during the early 1930s (with Joseph Mason), the other analyzing New York City banks during the entire interwar period (with Berry Wilson)—I find that deposit withdrawals varied greatly across banks. Banks that should have been judged as riskier *ex ante* suffered greater withdrawals of deposits. The study of Chicago banks uses failure prediction models to estimate *ex ante* failure risk, while the study of New York banks uses balance sheet and stock price information to estimate the risk of bank failure. In both cases, individual bank risk was a significant predictor of deposit withdrawal, which suggests that depositor withdrawal was a source of market discipline that penalized banks for observable weakness. In the case of New York, we also studied how banks responded to discipline. We found that when the risk of default rose and deposits fell, banks tried to restore depositor confidence by contracting lending (to reduce asset risk) and by cutting dividends (to reduce leverage).

Our study of Chicago banks permitted an analysis of the

times and whether the characteristics of panic failures suggest that they were among the weakest banks.

By all *ex ante* measures of default risk (including interest paid on deposits in the year prior to the panic, the decline in deposits in the year before the panic, estimated failure probability, and market valuation of bank assets) banks that failed during the panic were observably weaker banks (compared with panic survivors) months in advance of the panic. Furthermore, in all cases where we were able to find examiner records, examiners noted significant problems at those banks months in advance of the panic, including large loan losses and dishonest or imprudent banking practices. We conclude that although many solvent banks experienced some withdrawal of deposits during the panic, only the weakest banks failed.

Cooperation Among Solvent Banks Several of the strongest Chicago banks did experience large withdrawals of funds, and one bank in particular was almost shut down voluntarily by its managers to stem continuing withdrawals. Thus there was depositor confusion during the Chicago panic and it might have forced at least one bank to fail (and possibly others in its wake). But the Chicago clearing-house banks acted as a group to support the threatened institution. By pledging their joint support for the bank they were able to help it qualify for assistance from the Reconstruction Finance Corporation. Because the RFC maintained very strict collateral requirements in 1932, cooperation among the Chicago banks was essential to preventing the closure of the threatened bank. Thus we conclude that cooperation to resolve information externalities was still feasible and possibly important during the Depression.

The Political Economy of Deposit Insurance If bank failures and withdrawals of deposits from banks during the Depression typically did not reflect uninformed panic, but rather fundamental weakness, then why did advo-

cates of federal deposit insurance claim otherwise? As Mark Flood shows in his review of the deposit insurance debate of the 1930s, deposit insurance was opposed by officials in the Treasury and the Fed, by influential bankers, by Sen. Carter Glass, and by President Roosevelt. It did not win the day because of convincing economic arguments about its value for avoiding unwarranted runs. Indeed, the fact that deposit insurance was limited to small deposits suggests that owing to asymmetric-information problems it would have had very little ability to prevent runs on banks. What deposit insurance did succeed in doing was to bring to a halt the bank merger wave of the 1920s by removing the incentive for small banks to participate in diversifying consolidation.

In my paper with Eugene White examining the political struggle over federal deposit insurance we argue that deposit insurance was a payoff to politicians who represented the interests of small bankers, who had been pushing for federal deposit insurance since the 1880s, and who saw in federal insurance protection of small deposits (funded by equal charges on all banks) a means to obtain a transfer from large banks. Large banks were better diversified and had fewer small deposits; thus small banks stood to gain from risk pooling through the insurance fund at the expense of large banks.

Deposit insurance is not just a transfer from the strong to the weak. It is a highly distortionary means of transferring funds because the amount of resources implicitly transferred to a bank through insurance protection is an increasing function of both the riskiness of bank assets and bank leverage. Because deposit insurance subsidizes risk, it promotes banking system fragility. The last 20 years have witnessed an unprecedented wave of banking system collapses. Many researchers have shown that deposit insurance itself is largely to blame for the vulnerability of banking systems within the United States and around the world. Interestingly, this incentive problem of deposit insurance was well understood at the time of the passage of federal deposit insurance, owing to the fact that several states had experimented (all unsuccessfully) with deposit insurance for state-chartered banks during the post-World War I period. My study of those state deposit insurance systems shows that states with mandatory deposit insurance produced the most vulnerable banking systems, *ceteris paribus*, and saw the largest losses to their state-chartered banks during the agricultural price collapse of the 1920s.

Conclusion

together, new research on the history of banking instability and regulation in the United States suggests the need to reevaluate views of the inherent instability of banking systems and the value of deposit insurance. It also suggests that it is both desirable and feasible to incorporate market discipline into banking to promote greater efficiency and stability. Although it may not be politically feasible or economically desirable to repeal federal

deposit insurance outright, it is certainly desirable to find ways to force banks to meet market-risk standards on the margin. In other research, economists, including myself, have argued that it is possible to combine insurance of deposits with market discipline by requiring that banks maintain a minimum proportion of credibly uninsured debt as part of their financing mix. This approach enjoys the support of many policymakers in a wide variety of countries. The new interest in restoring market discipline to the banking system reflects a dramatic shift in opinion about the costs and benefits of insulating banks from the penalties imposed by their creditors.

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