Is the Fed's Seasonal Borrowing Privilege Justified?

Stanley L. Graham

Economist
Research Department
Federal Reserve Bank of Minneapolis

Since their beginnings in 1913, the twelve regional Federal Reserve Banks have been authorized to lend money to member banks at an interest rate set by the Federal Reserve System: the discount rate. The Fed's loans to member banks have been justified by policymakers on two grounds. One justification is that such loans are needed in the event of national banking emergencies—circumstances that place the Fed in the position of "lender of last resort." The prime example of the Fed meeting such an emergency is the financial turmoil in the late 1920s and early 1930s, when many member banks used loans from the Fed's discount window to help them adjust to the financial pressures of that period.

The other justification given by policymakers for Fed loans to member banks is that money markets do not efficiently or adequately meet the recurring requirements banks have for funds in their day-to-day operations. This justification was enunciated in a 1971 report of a Federal Reserve System committee appointed to appraise the Fed's lending function:

> Distributive mechanisms [for money] among both economic and geographic sectors in the United States are often imperfect and in some cases clearly inadequate. This results in problems of [money] distribution which the Federal Reserve can compensate for only through a technique such as discounting [lending through its discount window]. The window can meet the temporary needs of particular banks directly as they arise, without waiting for the sometimes sluggish distributive mechanisms to carry credit injected into the central money market to the point of actual need.[1]

Before 1973, the conditions for borrowing from the Fed based on this market-failure rationale were limited. Banks were permitted to borrow from the Fed in response to unexpected fluctuations in deposits and loan demand. However, the amount any one bank could borrow, the length of each borrowing period, and the frequency with which such loans could be obtained were closely monitored by Fed officials. Moreover, the Fed discouraged frequent borrowing by subjecting borrowing banks to disciplinary contacts by discount officers.

The market-failure rationale underlying Fed lending to member banks became much more significant in 1973 with the establishment of the *seasonal borrowing privilege*. The stated purpose of the new privilege was to make funds available to member banks that "lack reasonably reliable access to national money markets."[2] The privilege was designed primarily to provide funds to small rural banks—the banks that, in the view of policymakers, are adversely affected by market failure—during regularly recurring periods of heavy loan demand, such as the crop planting and growing seasons. Because of the large number of small

[1] Board of Governors of the Federal Reserve System. *Reappraisal of the Federal Reserve discount mechanism*, 1971, p. 6.

[2] Board of Governors of the Federal Reserve System. *Federal Reserve Bulletin*, April 1973, p. 314. Some people contend that the underlying motivation for the seasonal borrowing privilege was to make membership more attractive to small rural banks. Membership will only be made more attractive, however, if there is a subsidy to the appropriate banks or if the seasonal borrowing privilege offsets a market failure. We do not consider the subsidy issue here because subsidizing small rural banks has never been the explicit purpose for the seasonal borrowing privilege. Thus it is difficult to evaluate whether or not the Federal Reserve has achieved its goal.

The evidence does seem to show, however, that the privilege has not been used much in this way or that, if it has, it has failed. Presumably, small banks would be more likely to desire membership if they could be guaranteed a subsidy of a given size. While there has been a subsidy, it has varied over time and among banks. The discount rate has fluctuated above and below the market rates; and when it has been below market rates, mostly large banks, not small ones, have taken advantage of the privilege.

rural member banks and the long borrowing periods permitted, the seasonal borrowing privilege has greatly expanded the potential use of the Fed's discount window.

There are those who believe, however, that the market-failure rationale is an unsupported hypothesis, and so they question the value of the seasonal borrowing privilege. To be sure, the efficiency and adequacy of the money market in providing funds to small rural banks is inhibited by the presence of government regulations. For example, federal and state regulations prohibit banks and other financial depositories from paying market rates on most savings and time deposits when those rates exceed legal ceilings, and over the past 15 years these ceiling rates have often been below market rates. Nonetheless, some deposits and other types of bank liabilities are not subject to interest rate ceilings, and banks do find ways to obtain these funds.

The purpose of this study was to test the market-failure hypothesis by evaluating the use of the seasonal borrowing privilege. Much of the evidence has been drawn from use of the seasonal borrowing privilege at the Federal Reserve Bank of Minneapolis from 1973 to 1978. Because of its rural orientation, the Ninth District[3] contains the highest proportion of banks eligible to use the privilege of any district in the Federal Reserve System.

The findings of the study do not support the market-failure hypothesis. First, banks eligible for the seasonal borrowing privilege have made little use of it. And second, most of those banks that have used the privilege are clearly banks that could have obtained funds from the money markets but chose to use the privilege when the discount rate was below market rates.

The seasonal borrowing experience so far suggests, therefore, that this Federal Reserve policy is not justified as a market-failure remedy: there simply is no evidence that the market has failed. However, the privilege is still fairly new, and some transitory factors may have prevented the banks it was meant to help from using it. So the Fed may want to continue this privilege until we have more conclusive evidence. Seasonal loans should only be available at market rates, though, so that, as intended, the privilege would only be used by banks who have no other choice.

Rationale for the Seasonal Borrowing Privilege

Rural banks experience seasonal fluctuations in loans and deposits because they generally serve one-industry towns, and those industries often have a pronounced seasonal pattern of expenditures and incomes. The most common single industry in rural communities is, of course, agriculture. In communities where agriculture is the dominant industry, funds at banks decline in the spring and summer as farmers withdraw deposits and take out loans to buy seed and fertilizer and to provide for their operating and living expenses. In the fall and winter, the funds flow is reversed as farmers build up their savings and pay off loans with the proceeds from the harvest. Thus banks that serve agricultural communities may need funds from outside their areas for as long as six or nine months to offset the seasonal dip in local funds.

Before the seasonal borrowing privilege became available, rural banks typically financed this seasonal dip by selling liquid assets such as U.S. Treasury bills or other short-term securities in the spring and summer and buying them again in the fall when funds flowed back. But this source of funds has diminished steadily since World War II when policies aimed at shifting the nation's resources to the war effort promoted a high ratio of government securities relative to loans at rural banks. In 1945 the ratio of securities to total assets of small member banks in the U.S. stood at 63.5 percent, but by 1972, the year before the privilege became effective, it had declined to 30.6 percent (see chart). This decline was due to an increase in the demand for, and in the profitability of, bank loans. The stronger demand for loans at rural banks reflected both the burgeoning agricultural credit requirements as that industry became more mechanized and the increasing capital needs of small industrial firms relocating in rural areas to capture their lower wage rates.

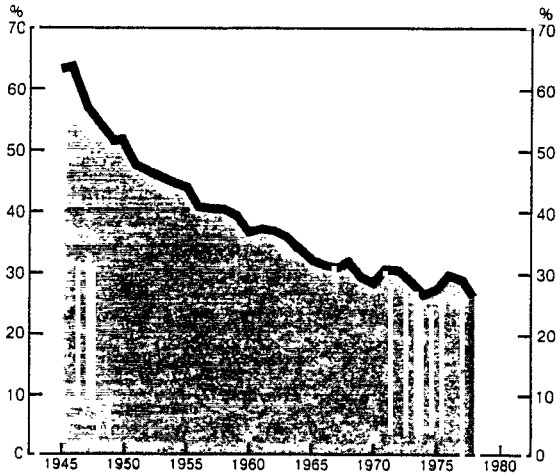
The continuing decline in the share of liquid assets in bank portfolios concerned policymakers.[4] They feared that the proportion of liquid assets in the portfolios of rural banks would soon reach the lower bound dictated by regulations, contracts, and prudent managerial requirements and that at that point, if not sooner, banks would not make new funds available for loans. Without governmental involvement, banks would be forced to ration loans, even though borrowers

[3]The Ninth Federal Reserve District includes Minnesota, Montana, North and South Dakota, northwestern Wisconsin, and the Upper Peninsula of Michigan.

[4]*Reappraisal*, pp. 15–16.

The shrinking share of liquid assets in bank portfolios led to the introduction of the seasonal borrowing privilege.

Securities as a Percentage of Total Assets at U.S. Small Member Banks 1945–78



Source: Board of Governors of the Federal Reserve System

were willing to pay market rates of interest. Since banks are the major financial institutions in many rural communities, such action would hurt those communities.

Crucial to the policymakers' fears that the time would come when loans would not be available is the assumption that rural banks could not easily obtain funds from the money market.[5] There are three main reasons for this assumption. First, policymakers contended that rural banks are too small to compete directly in the national money market.[6] The two principal regulation-free markets banks have for obtaining funds are those for Federal funds and large certificates of deposit. Transactions in both instruments, they claimed, are conducted in denominations beyond the capacity or desire of small banks to undertake. The risk for lenders, many believe, is too great at these levels because rural banks don't have sufficient capital and government deposit insurance is inadequate. Moreover, there may not be enough loan demand to absorb the amount of funds borrowed.

Second, policymakers argued that although small banks could get smaller amounts from correspondent banks, the correspondent banking system is not a reliable provider of seasonal funds.[7] A large correspondent bank is capable of acting as an intermediary between small rural banks and the national money market. It can do this by lending funds obtained from the money market directly to its rural respondent banks or by using these funds to buy participations in loans originated by these banks. But policymakers argued that the correspondent system doesn't always work this way. Correspondent banks only lend to their rural respondent banks from excess funds on hand. As long as interest rates are low and their own loan demand is weak, correspondent banks are willing to provide funds to their rural bank respondents. When interest rates rise and their loan demand from nonbank customers strengthens, however, correspondent banks seek to fill the needs of their nonbank customers first and thus are not reliable sources of funds for small rural banks.

Third, policymakers contended that the money market doesn't work well in rural areas because government regulations designed to attain other policy goals shut off access to outside funds by restricting the freedom of rural banks to join multioffice banking organizations.[8] A bank with branches or a multibank holding company can do for its individual branch offices or bank affiliates what the capital market does for independent firms—shift funds from areas of low loan demand to areas of high demand. If the desired funds cannot be obtained by shifting funds between offices, the parent organization is likely to be large enough to obtain funds in the money market directly. However, in many states where small rural banks predominate, regulations prohibit branching; and although some of these states permit rural banks to join bank holding companies, regulators have often prevented such mergers out of fear that bank competition will diminish.

The belief that small rural banks would therefore at some time be unable to obtain funds with which to fill customer loan demand led the Federal Reserve to

[5] *Reappraisal*, p. 15.

[6] *Reappraisal*, p. 54.

[7] *Reappraisal*, pp. 61–62.

[8] *Reappraisal*, p. 62.

establish the seasonal borrowing privilege.

How the Privilege Is Administered

The Federal Reserve makes the seasonal borrowing privilege available to all of its member banks that demonstrate a substantial seasonal dip in funds available for making loans. A *seasonal dip in funds* is defined as a decline in net fund availability—deposits minus loans—that recurs at about the same time each year and that lasts for at least one month. The amount of seasonal credit that a bank can get from the Fed during this period is limited to the amount by which the seasonal dip in funds exceeds a specified proportion of its deposits. The proportion is progressive, starting with 4 percent on the first $100 million of deposits and rising to 10 percent on deposits of more than $200 million. The maximum term of the seasonal loan is not specified in the regulations, but in practice it may run as long as nine months.

As policymakers intended, the main beneficiaries of these eligibility requirements are the small rural banks, the banks that were thought to be cut off from the money market. In 1976, when the most recent revision in the seasonal borrowing privilege was made, 47 percent of all U.S. member banks appeared to be eligible to borrow under the privilege. Eligibility was relatively high for small banks, as 52 percent of banks with deposits under $25 million qualified compared to only 22 percent of banks with deposits over $250 million. Eligibility was also relatively high for rural banks, as 62 percent of banks with farm loans comprising at least one-fourth of all their loans qualified for the seasonal borrowing privilege compared to 40 percent of banks with farm loans accounting for less than one-twentieth of their loans. Although many banks are eligible, the credit available for each bank is small, on average. In 1976 the estimated maximum amount that all eligible banks could borrow under the seasonal borrowing privilege was $736 million on a daily average basis, representing only 1.4 percent of total loans at all eligible banks.

No Support for the Market-Failure Hypothesis

That financial markets are unavailable to rural banks is not evident from the use they have made of the seasonal borrowing privilege since 1973.

In the first place, they have not used the privilege very much. Nationally, annual participation in the first five years the seasonal borrowing privilege was in effect never exceeded 18 percent of eligible banks. The dollar volume of seasonal borrowing also remained small compared to what could have been borrowed. In 1978, for example, annual average borrowing totaled $121 million—only 17 percent of the funds available.

The small proportion of eligible banks that have used the privilege suggests at the very least that the market failure was less extensive than policymakers believed. And so does the fact that usage has not grown steadily. Increased use could have been expected because the proportion of liquid assets in portfolios of the nation's rural banks has declined since the privilege went into effect. Between 1972 and 1978, the ratio of securities to total assets for small member banks declined from 30.6 percent to 26.8 percent. But the proportion of eligible banks that borrowed under the privilege, instead of rising, declined from 18 percent in 1974 to 15 percent in 1978.

Secondly, most banks that have borrowed under the seasonal borrowing privilege seem to have done so not because they had to but because the discount rate was below market rates.

Based on the arguments that policymakers have used to justify the privilege, banks that have borrowed under it could be expected to be small and independent. They would be small because the national money market only deals in large denomination instruments that are out of the direct reach of small banks. They would be independent—that is, not branch banks or affiliates of multibank holding companies—because otherwise they could obtain funds either from other offices or from the money market through the holding company itself. They would not be able to rely on a correspondent bank because when interest rates rise, correspondent banks choose to allocate funds to their nonbank customers first.

Evidence about the characteristics and behavior of banks that have actually borrowed under the seasonal borrowing privilege is based on an examination of member banks in the Ninth District that borrowed between 1973 and 1978. An analysis of this district is appropriate because it contains a large number of eligible and borrowing banks. About 70 percent of Ninth District member banks—about 375 banks altogether—are eligible for the privilege, a higher proportion than in any other district and much more than the 46 percent national average. But as in the nation, the proportion of Ninth District eligible banks that

Table 1

Banks using the seasonal borrowing privilege have tended to be large.

Size Distribution of Ninth District Banks

Bank Category	Deposit Size as of June 1978			
	Less than $10 mil.	$10 to 25 mil.	$25 to 50 mil.	$50 mil. and over
All FRS members	23%	37%	22%	18%
Eligible seasonal borrowers (1973–78)	23	38	23	16
Seasonal borrowers (1973–78)	11	25	33	31

Source: Federal Reserve Bank of Minneapolis

have borrowed has remained small and even declined —from 19 percent in 1974 to 11 percent in 1978. Altogether, about 75 banks used the seasonal borrowing privilege at some time during the six years.

But most of these banks were not the ones for which the seasonal borrowing privilege was intended. They were neither small nor independent.

Indeed, Ninth District banks that borrowed under the seasonal privilege tended to be relatively large (see Table 1). Only 16 percent of the eligible banks had deposits of $50 million or more, but 31 percent of the banks that borrowed were this large. On the other end of the size spectrum, banks with deposits of less than $10 million accounted for 23 percent of eligible banks but only 11 percent of seasonal borrowers. In short, a disproportionate number of large banks borrowed under the privilege, while a disproportionate number of small banks seemed to get along without it.

Furthermore, in this district borrowing banks tended to be affiliated with multibank holding companies. Of the banks eligible for seasonal borrowing, 30 percent were multibank holding company affiliates, but among borrowing banks 55 percent were affiliates. Only 13 percent of the eligible independent banks took advantage of the privilege.

The Ninth District banks that borrowed from the Fed under the seasonal privilege also frequently borrowed from other banks even when market rates were high (see Table 2). From 1974 to 1978, seasonal borrowing banks, on average, borrowed Federal funds in more than half the weeks of each year; less than 5 percent never borrowed Federal funds during that period. Further, the frequency of Federal funds borrowing was not materially affected by high interest rates. In 1974, when the funds rate averaged 10.5 percent, Federal funds were borrowed just about as

Table 2

Banks using the seasonal privilege have often borrowed from other banks, even at high interest rates.

Year	Average Number of Weeks in Which Ninth District Seasonal Borrowers Borrowed Fed Funds	Fed Funds Rate
1974	51%	10.51%
1975	51	5.82
1976	56	5.05
1977	54	5.54
1978	61	7.94

Sources: Federal Reserve Bank of Minneapolis, Board of Governors of the Federal Reserve System

often as in 1975 and 1976, when the rate averaged 5.8 percent and 5.1 percent, respectively. And between 1977 and 1978, the frequency of Federal funds borrowing actually increased, even though the average interest rate rose from 5.5 to 7.9 percent. All this is strong evidence that the banks that used the privilege were able and willing to borrow at other banks; they did have access to money markets.

Why did they use the Fed's seasonal borrowing privilege, then? The evidence suggests that most banks used it not because market sources were not readily available, but mainly because the Fed offered the lower rates. Changes in the number of district banks using the seasonal borrowing privilege have been closely correlated with changes in the difference between the Federal funds rate and the discount rate (see Table 3). When that difference widened, as in 1978, more banks borrowed at the discount window. When it shrank, and even became negative as in 1975–77, the number of seasonal borrowers shrank too.

Conclusion

The experience with the seasonal borrowing privilege does not support the market-failure hypothesis. We find no evidence that small rural banks, for whom the privilege was intended, have been systematically excluded from money markets. Moreover, most banks that have used the privilege fall into categories for which the question of access to money markets must be rejected out of hand.

The evidence, however, is not conclusive. The small proportion of banks that have borrowed under the privilege and the lack of an upward trend seemingly reject the market-failure hypothesis. But there may be other reasons why banks without access to the money markets have not borrowed from the Fed. Policy makers could have overestimated the point at which banks would stop reducing liquid assets in order to provide loan funds for their customers. Moreover, banks might view the privilege as an assured line of credit, thus enabling them to continue reducing liquid assets until legal limits prohibit further liquidation. And, possibly, bankers may not have had enough time to adjust to the Fed's less restrictive administration of the discount window.

Thus, even though the seasonal borrowing privilege cannot now be justified as a market-failure remedy, perhaps the policy should be continued for a time. If it is to be continued, however, the privilege should only be available at the market rate. This would ensure that the privilege is not used simply because it is cheaper. Any use then would more likely be evidence that the market really has failed.

Table 3

Seasonal borrowing has been closely related to the spread between the Fed funds rate and the discount rate.

Year	Number of Ninth District Seasonal Borrowers	Fed Funds Rate Minus Discount Rate (basis points)
1974	48	268
1975	15	–42
1976	11	–45
1977	14	7
1978	40	47

Sources: Federal Reserve Bank of Minneapolis, Board of Governors of the Federal Reserve System

The views expressed herein are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.