

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Crain themas

UNIVERSITY OF CALIFORNIA DAVIS

FEB 4 19/4

Agricultural Economics Library

Rural Banks and the Federal Reserve's New Seasonal Borrowing Privilege

Paper presented at the joint annual meetings of the American Agricultural Economics Association, Canadian Agricultural Economics Society, and the Western Agricultural Economics Association

The University of Alberta

Edmonton, Canada

August 9, 1973

Emanuel Melichar

Division of Research and Statistics

Board of Governors of the Federal Reserve System

Washington, D. C. 20551

Rural Banks and the Federal Reserve's New Seasonal Borrowing Privilege

Emanuel Melichar*

In April 1973, the Federal Reserve Board revised the administration of its discount window (Regulation A) to institute a "seasonal borrowing privilege" for many of the member banks of the Federal Reserve System [2]. Under this privilege, a member bank that lacks access to money markets and that experiences a relatively substantial outflow of funds at about the same time each year can prearrange to borrow from its Federal Reserve Bank to accommodate part of that outflow. With the availability of seasonal funds thus improved, many of these banks can be more responsive to both seasonal and other credit needs of their communities. Because seasonal economies are common in rural areas, it is particularly appropriate that rural bankers and agricultural finance specialists be acquainted with the rationale, nature, and potential impact of the new seasonal borrowing privilege.

Background

Previous attitude toward seasonal borrowing

The general principles governing administration of the discount window during the last two decades were set forth in the 1955 revision of Regulation A. At that time, almost all banks had heavily liquid positions. They could effectively meet most short-term fund outflows,

^{*} I am grateful for guidance provided by P. D. Ring, Assistant Director, and Virginia Timenes, Economist, Division of Federal Reserve Bank Operations, and for statistical assistance supplied by Harriet Holderness, Research Assistant, Division of Research and Statistics, Board of Governors of the Federal Reserve System.

including seasonal drains, by selling liquid assets during the period of outflow and then reinvesting the subsequent inflow into similar securities. Given this banking environment, the over-all intent of the 1955 guidelines was to limit the amount of credit available at the discount window, particularly during periods of monetary restraint.

Thus, on the issue of credit for seasonal purposes, "it was indicated that the Federal Reserve had responsibility for responding to the seasonal swings in reserves that affect the banking system as a whole, but that member banks should generally meet foreseeable seasonal swings out of their own resources. Since seasonals are, by definition, largely foreseeable, it is reasonable to believe that credit for such purposes was intended to be restricted to the exceptional case" [9, p. 40].

Specifically, Regulation A as adopted in 1955 allowed use of the discount window if a bank experienced "seasonal requirements for credit beyond those which can reasonably be met by use of the bank's own resources" [1, p. 3]. A survey in 1965 established that administration of borrowing under this guideline differed substantially among Federal Reserve Banks [9, p. 45]. Most Reserve Banks, however, limited borrowing arising from seasonal events to cases where the need was unforeseen and of such proportions that it clearly could not be met from the bank's own resources without unreasonable sacrifice.

Reappraisal of policy

In the decade following the 1955 revision of Regulation A, total loan demands on commercial banks tended to rise much faster than bank deposits. By the mid-1960's, liquidity positions of many banks had

been reduced to the point at which short-term fluctuations in loan demands or in deposits caused increasingly difficult portfolio adjustment problems for bank management. In recognition of the possible implications of the changed banking environment for appropriate discount policy, a Federal Reserve System committee was formed to conduct an intensive reappraisal of all aspects of the discount mechanism. The committee agreed with other observers that a problem in rural banking had emerged. "Particularly in agricultural areas, where credit needs have been rising very rapidly, such trends seem likely to continue, progressively narrowing the ability of the local banks to meet the short-term credit demands in their communities" [7, pp. 15-16].

The management of seasonal fund flows was of particular concern. Banking resources devoted to the seasonal cycle were being utilized in local loans for only part of each year, and some banks now had alternative, year-round local lending opportunities for these funds. In this circumstance, both the communities and the banks involved could ordinarily benefit if the banks drew on outside sources of funds to help meet their seasonal needs. Unfortunately, however, the committee found that "because of size, structure, and location, banks in small towns are often at a relative disadvantage in obtaining credit from other external sources, such as the issuance of large-denomination certificates of deposit . . . " Consequently, the committee reported, "seasonal fluctuations in loans and/or deposits create asset-and-liability-management problems which many smaller banks seem unable to accommodate without impairing in one way or another the quality and adequacy of banking

service they offer to their communities." The committee concluded that "under these circumstances, it has become appropriate to modify present seasonal lending practices at the discount window to provide increased assistance to member banks in accommodating seasonal demands upon them" [7, pp. 15-16].

Design of the new privilege

In its 1968 report, the committee therefore proposed the establishment of a "'seasonal borrowing privilege, ' renewable from one year to the next, . . . to provide reasonably assured credit access to banks with definable and relatively substantial seasonal pressures for the approximate duration of such pressures, normally expected to be several months, but possibly ranging up to as much as 9 months in exceptional cases" [7, p. 16]. The committee outlined a specific design for administration of the suggested privilege, and in so doing relied on empirical evidence indicating that the target banks -- the smaller banks for which seasonality presented significant portfolio adjustment problems--could be reached and other banks largely excluded by permitting borrowing only in cases of the larger relative outflows [5, pp. 104-106]. Internal memoranda subsequently published also indicate committee awareness that "many of the small banks with large relative seasonal flows are probably heavily involved in financing agriculture, a sector that in recent decades has been generating credit demands in excess of its contribution to the growth of country banking resources. The seasonal discount program would provide a net addition to the lending resources of such banks that currently find it difficult

to meet total local farm credit demands" [3, p. 109].

After the proposed privilege was favorably received, particularly by rural bankers, the Federal Reserve System's discount officers undertook an extensive investigation to devise administrative procedures that would accomplish the objectives sought. An appropriate data base was constructed to permit the simulation of alternative rules and practices. Seemingly viable administrative procedures were devised, and a refined design was ultimately published for public comment in 1972 and implemented by the Federal Reserve Board on April 19, 1973.

Nature of the Privilege

Eligibility of banks

To be considered for seasonal discount credit, a member bank must "lack reasonably reliable access to national money markets." One indicator of such access is the ability of the bank to sell large denomination (\$100,000 and over) negotiable time certificates of deposit (CD's). Studies by Board staff indicate that the relative outstanding volume of such CD's at individual banks is in general directly related to the over-all size of the banks. The average relative volume is low at banks with deposits under \$100 million and gradually increases with deposit size. The ability to raise funds through other money-market activities, such as by direct purchases of Federal funds or by sales of notes, finance bills, and securities under repurchase agreements, is also generally related to the size of the institution.

Qualification for seasonal borrowing

A bank's seasonal need for funds is defined as the need "arising

Table 1. Illustration of a Bank's Potential Seasonal Credit Need

	Seasonal	pattern	Net fund av	Potential		
Month	Average deposits	Average loans	Total (deposits less loans)	Difference from peak month	seasonal ₁ /	
•						
•			illions of dol			
January	\$10.1	\$5.7	\$4.4	\$0.1	\$0.0	
February	10.1	5.7	4.4	.1	.0	
March	9.9	5.4	4.5	.0	.0	
April	9.9	5.5	4.4	.1	.0	
May	9.8	5.9	3.9	.6	.1	
June	9.7	6.1	3.6	. 9	.4	
July	9.8	6.1	3.7	.8	.3	
August	9.6	6.2	3.4	1.1	.6	
September	9.9	5.9	4.0	.5	.0	
October	10.1	5.7	4.4	.1	.0	
November	10.2	5.7	4.5	.0	.0	
December	10.2	5.8	4.4	.1	.0	

^{1/} Difference in net fund availability between peak availability month and specified month, less 5 per cent of average deposits for the preceding year and subject to possible adjustments.

Source: Business Review, Federal Reserve Bank of Dallas, May 1973, p. 8.

from a combination of expected patterns of movement in its deposits and loans." For a bank to qualify for seasonal borrowing, a dip in its net fund availability (deposits minus loans) should recur at about the same time each year and must persist for at least eight consecutive weeks. The amount of seasonal credit extended during this period is ordinarily to be limited to the amount by which the seasonal dip exceeds 5 per cent of the bank's average total deposits in the preceding calendar year.

For illustrative purposes, in Table 1 monthly seasonal credit needs have been calculated for a bank that has average deposits of \$10 million and that, as is typical in rural areas, experiences a seasonal run-off in deposits along with simultaneous seasonal increase in outstanding loans. The bank could apply to its Reserve Bank, preferably no later than early March, for seasonal credit during the four months April through July. The amounts that the bank could borrow in these months are shown in the last column of the table.

Arranging for seasonal credit

Arrangements for use of the seasonal borrowing privilege should be made well in advance of the period of seasonal need. In processing seasonal loan requests, a Reserve Bank's loan officer will typically review the Reserve Bank's file of deposit and loan data for that bank for the most recent five years to determine if the seasonal pattern of these two items meets the duration and relative size requirements stated in the regulation. In addition, the loan officer may discuss the nature

of the seasonal need and other matters that will help him to administer the credit once it is arranged.

In some instances the Reserve Bank's loan officer may need to obtain additional data in order to assess the credit request, because the record of a bank's loans and deposits does not always provide adequate indication of a seasonal need. In particular, some banks may increase their holdings of money market instruments—such as Federal funds sold, commercial paper, and purchased participations—when they have excess funds available and then let such holdings run off as their local seasonal needs for credit develop. Because amounts of these holdings are included in total loans in official reports made by the bank, they tend to obscure the local seasonal variations unless separately identified. Similarly, some banks make seasonal loans to local governments that for reporting purposes are classified as securities rather than loans. Other banks may have sold seasonal loans to their correspondents. Adjustments for these and similar factors may be desirable in calculating the seasonal need.

The determination of the seasonal pattern in net fund availability is a key element that affects the amount and duration of the seasonal borrowing for which a bank is deemed to qualify. Most bankers already have a general impression of their seasonal need, which can be refined by averaging actual data on net fund availability for the last few years. At the Reserve Banks, each bank's request can be compared to the seasonal variation indicated for that bank by a widely-accepted computational procedure, variant X-11 of Census Method II. The latter result, however,

is only employed as a first approximation to a bank's probable qualification for seasonal borrowing because the input data generally do not reflect various adjustments that may be desirable as outlined above.

Potential Use of the Privilege

Potential use of the new privilege has been determined in a statistical sense by computing the maximum borrowing for which each member bank might qualify. To do this, monthly data on net fund availability at each bank were constructed from weekly data on deposits and loans, which were readily available on an individual bank basis only for years after 1967. There were 5,420 banks for which data were available throughout the 1968-1972 period or, in the case of mergers, for which comparable data for this period could be constructed. (Banks established during the period were omitted from the analysis.) The seasonal adjustment procedures of Census Method II, variant X-11, were applied to each of these series to obtain the seasonal variation in net fund availability projected for 1973. Potential seasonal borrowing at each bank was then computed as previously illustrated in Table 1.

For purposes of these estimates, banks with deposits up to \$250 million were considered. Also, the loan data used were not adjusted for items such as sales of Federal funds or purchases of commercial paper. Monthly-average data were employed throughout.

Within these limitations, the data that follow indicate the maximum use that member banks could have made of the seasonal borrowing privilege if it had been in existence during all of 1973. In practice, of course, many banks that would qualify will not apply for the privilege

Table 2. Banks potentially qualifying for the seasonal borrowing privilege

		i					
Characteristic	Qualifying percentage		Percentage distribution				
of bank	Insured	OI GII	of				
	commercial	Member	qualifying				
	banks	banks	banks				
All qualifying banks	14	34	100				
Area:							
New England	29	48	6				
Mideast	11	15	6				
Southeast	11	31	18				
Great Lakes	10	22	15				
Plains	14	50	26				
Southwest	20	43	18				
Rocky Mountain	33	55	9				
Far West	12	33	2				
Location of bank:							
In SMSA	12	25	30				
Not in SMSA	15	40	70				
Farm loans as percentage of total loans:		etalo en jedeje Na jedeska e					
No farm loans	13	29	12				
1 to 4	12	22	19				
5 to 24	12	27	23				
25 to 49	15	44	22				
50 and over	19	68	 24				

simply because they do not have additional local lending opportunities in which to employ such funds, or because they prefer to provide for their seasonal needs in other ways.

Incidence of qualification

An estimated 1,930 member banks qualify for the seasonal borrowing privilege during some period of the year. As indicated in Table 2, this number represents 14 per cent of all insured commercial banks and 34 per cent of all member banks. The proportion of member banks qualifying varies considerably among different areas of the nation, ranging from 15 per cent in the Mideast to 50 per cent or more in the Plains and Rocky Mountain States.

Banks in rural areas are more likely to qualify. Of member banks located in Standard Metropolitan Statistical Areas (SMSA's),

25 per cent qualify for the privilege, compared with 40 per cent for member banks outside of these areas. The relative importance of farm lending activity is clearly related to qualification. For instance, among member banks at which farm loans constitute at least one-half of all loans outstanding, 68 per cent qualify for seasonal borrowing.

The degree of agricultural lending activity also greatly affects the intrayear pattern of potential seasonal borrowing. Among banks with no farm loans, qualification for seasonal borrowing is fairly evenly distributed throughout the year, with perhaps a slight peak during the year-end holiday season (Table 3). But at the banks heavily involved in farm lending, qualification for the privilege varies sharply from a mid-winter low to a peak in late spring.

Table 3. Estimated monthly pattern of potential seasonal borrowing

									<u> </u>					
		\nnual		•						•				
Characteristic	total			Month										
of bank						T			T		T			
			Jan	Feb	Mar	Apr	May	Jun	Ju1	Aug	Sep	Oct	Nov	Dec
						-					Ī.			
					•	·								<u> </u>
		Qu	alify	ing	bank	s as	per	cent	age	of a	11 m	embe:	r ba	nks
All qualifying ban	ks	34	7	13	17	19	23	24	20	19	17	14	12	10
1001117 1118 7011												- ; rs,		10
Area:						2								•
			1.				*							
New England		48	2.5	38	43	36	34	. 33	27	19	10	6	9	19
Mideast		15	5	7	9	8	9	9	8	7	6	4	5	6
Southeast		31	4	. 7	11	12	. 18	20	19	22	23	20	18	11
Great Lakes	• • • • • •	22	7	10	11	11	14	13	11	10	10	- 6	` 6	5
Plains		50	8	16	25	31	39	40	32	26	22	19	14	11
Southwest	• • • • • • • • • • • • • • • • • • •	43	8	15	21	23	29	31	24	22	21	21	20	16
Rocky Mountain	• • • • • •	55	7	23	30	36	42	43	44	44	37	28	14	7
Far West		33	10	16	19	19	22	23	20	18	11	6	9	10
Location of bank:		<i>i</i>					• . •							
In SMSA		25	6	10	11	10	12	13	13	15	15	12	12	11
Not in SMSA	· · · · · · · · · · · · · · · · · · ·	40	_	15		24						16		9
			•				. 30	30				10		
Farm loans as perc	entage			,						,			-	
of total loans:		, i	*-				•		* .*		7 - 1			
							,					*		
No farm loans		29	10	14	15	12	13	14	13	13	13	13	15	15
1 to 4		22	6	10	11	10	12		11	12	12	10	10	8
5 to 24		27	5	9	12	13	17	18	15	15	14	11	8	6
25 to 49		44	6	16	23	27	35	.36	30	28	25	18	12	7
50 and over		68	15	24	37	47	56	56	45	36	31	29	24	20
											-			0

A different measure of the incidence of the new privilege is the proportion of total bank loans that are made by the member banks that qualify. As shown in the first two columns of Table 4, the qualifying member banks hold 6.5 per cent of the total outstanding loans at all insured commercial banks and 8.1 per cent of the loans at all member banks. These proportions are relatively low because large banks were excluded from the privilege. In rural areas where few large banks are located, the proportions are considerably higher. For instance, qualifying banks outside of SMSA's hold 27.7 per cent of all bank loans in these areas.

Potential amount of borrowing

Over the year as a whole, potential seasonal borrowing averages \$591 million. In June, the peak month, 1,311 banks qualify to borrow \$883 million. By January, potential borrowing drops to the year's low of \$188 million at 397 banks.

These amounts of potential seasonal borrowing are very small when compared with total outstanding loans held by banks. On an annual average basis, potential seasonal borrowing corresponds to just 0.21 per cent of total loans at all member banks. In June, the peak month, when 24 per cent of member banks qualify for seasonal borrowing, the potential borrowing represents only 0.32 per cent of the outstanding loans at all member banks. Obviously, even maximum use of the privilege would have relatively minor impact on over-all lending by member banks.

On the other hand, the potential impact on individual banks exposed to relatively severe seasonal variation can be of considerable significance to these banks, as shown in the last two columns of Table 4.

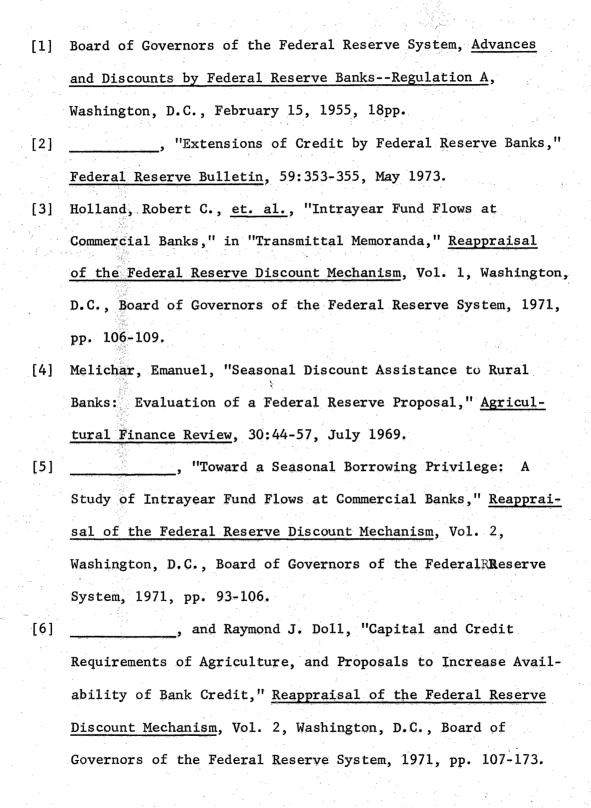
Table 4. Potential impact of the seasonal borrowing privilege

			The state of the s					
·	Total loans at	qualifying	Potential seasonal borrowing as percentage of total loans					
	banks as perce	entage of						
Characteristic	total loans	at all	at qualifying banks					
of bank	Insured commercial banks	Member banks	Annual average	Peak month $1/$				
United States	6.5	8.1	2.6	7.6				
Area:								
New England	13.9	18.2	2.3	6.0				
Mideast	2.0	2.2	2.4	7.1				
Southeast	10.3	15.3	3.0	8.5				
Great Lakes	5.6	6.9	1.5	5.5				
Plains	15.8	26.0	2.6	7.5				
Southwest	11.4	15.5	3.7	10.1				
Rocky Mountain	18.6	23.1	3.4	8.9				
Far West	1.3	1.4	1.4	5.2				
Location of bank:		en de la companya de						
notation of bank.								
In SMSA	4.8	5.5	2.4	7.1				
Not in SMSA	14.8	27.7	3.0	8.4				
Farm loans as percentage of total loans:								
No farm loans	9.7	13.7	2.7	7.8				
1 to 4	3.9	4.4	2.2	6.5				
5 to 24	10.9	15.8	2.3	7.1				
25 to 49	15.8	33.6	3.5	9.4				
50 and over	22.0	58.9	4.7	12.0				

^{1/} Peak month at each individual bank.

At the qualifying banks, potential borrowing corresponds to 2.6 per cent of outstanding loans on an annual basis. Furthermore, the peak month's potential borrowing for individual qualifying banks averages 7.6 per cent of the outstanding loans at these banks, and this ratio rises to 12.0 per cent at the banks at which farm loans comprise one-half or more of total loans. At 36 per cent of the qualifying banks, potential borrowing during the peak month of seasonal need exceeds 10 per cent of loan volume. As these data demonstrate, the seasonal borrowing privilege can be of significant assistance where seasonality is indeed a material factor, as it often is at rural banks.

References



- [7] Mitchell, George W., et. al., "Report of a System Committee,"

 Reappraisal of the Federal Reserve Discount Mechanism, Vol. 1,

 Washington, D.C., Board of Governors of the Federal Reserve

 System, 1971, pp. 1-25.
- [8] Shull, Bernard, "Rationale and Objectives of the 1955 Revision of Regulation A," Reappraisal of the Federal Reserve Discount

 Mechanism, Vol. 1, Washington, D.C., Board of Governors of the the Federal Reserve System, 1971, pp. 117-131.
- with a System Study," Reappraisal of the Federal Reserve Discount Mechansim, Vol. 1, Washington, D.C., Board of Governors of the Federal Reserve System, 1971, pp. 27-75.