MORE LOANABLE FUNDS FOR RURAL BANKS

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The financing of agricultural capital, particularly through bank lending, is of considerable interest to the Federal Reserve System. This paper draws on a number of research projects undertaken over the last ten years. In the mid-1960's, a national survey of bank financing of agriculture quantified the problems that had emerged after nearly two decades of rapid expansion of borrowing by farmers. At about the same time, a thorough reappraisal of Federal Reserve discount policy gave much attention to these problems of rural banks and recommended institution of a seasonal borrowing privilege from which many of them could benefit. After much additional work on its design, such a privilege was implemented in April. As also recommended in that reappraisal, a study committee has more recently focused on the means by which rural banks might obtain money-market funds. Finally, as part of a continuing analysis of agricultural finance trends, a flow-of-funds econometric model of the farm financial sector has recently been constructed and used in the study of past relationships and the projection of probable future trends.

Farm capital and credit demands

It might be useful to begin with the farm credit projections obtained when probable longer-run agricultural trends were simulated in that model. Farm debt during this decade was projected to increase at an average annual rate of 7.1 per cent, considerably below the 8.9

per cent average of the 1960's. Similar simulation of a more elaborate model constructed by Department of Agriculture analysts yielded a projection of 7.6 per cent. Over the first three years of this decade, debt again rose at rates typical of the 1960's, but this performance actually appears relatively subdued when contrasted to the extraordinary increases occurring in farm output and land prices, capital spending, and real estate transfers.

A second point to be made at the outset concerns the availability of credit to agriculture in general. Credit demands of farmers will fluctuate for various reasons, as will the availability of farm loans from lenders such as banks, life insurance companies, and sellers of farms. However, through the cooperative Farm Credit System, agriculture has elastic access to the national flow of money-market funds. Borrowings through that System can expand or contract as necessary to fill the gap between demands for and other supplies of farm loan funds--provided, of course, that the borrowers pay the going national price for funds.

On the basis of the longer-term projections and of the elastic nature of the total supply of farm loan funds as demonstrated by farm credit experience of the last two decades, there seems little likelihood of significant near-term problems with the aggregate supply of credit to agriculture. Neither, therefore, does the increased use of capital in agriculture in itself appear likely to require radical changes during this decade in the structure of agriculture or of rural lending institutions.

A discussion of improved sources of loanable funds for rural banks is at this time therefore more properly approached as a banking problem than as an agricultural problem. Of course, farmers will benefit if banks are enabled to compete more aggressively for farm loans, but the bankers appear to have more at stake. In some communities, improved sources of funds may also primarily assist in the financing of nonfarm business or community facilities.

There are three broad categories of sources of more loanable funds at rural banks: growth of local deposits, more efficient use of banking resources, and increased use of nonlocal sources of funds. Each is examined in turn below.

Deposits--the major source of more loanable funds

The projected rate of growth in total farm debt--7 per cent annually--is approximately equal to the rate of growth in deposits experienced by rural banks in recent years. At the banks heavily involved in financing agriculture, hereafter called "agricultural" banks, the rates of loan and deposit growth have in fact been approximately equal over the last five years. As Table 1 shows, loan/deposit ratios at these banks rose rapidly in the early 1960's but have since remained approximately stable at the level first reached in 1967. Tables 2 and 3 demonstrate that the principal element responsible for this change was an increase in the rate of growth of total deposits, which in turn may be traced to the increasing importance of rapidly growing time and savings deposits. Table 3 shows how the growth rates of deposits and farm loans were

very similar at agricultural banks over 1967-1973, after having diverged markedly during the 1961-1967 period.

In the aggregate, therefore, one problem previously faced by agricultural banks has been at least temporarily resolved without marked resort to new sources of funds. There are many reasons, however, for continued interest in development of new sources. Many individual banks may still be experiencing divergent loan and deposit growth rates. Others may wish to meet presently unsatisfied or rapidly expanding nonfarm loan demands or to compete more aggressively for farm loan business. It would also be prudent for rural banks to develop fund-raising mechanisms against the day when time deposit growth slows or when loan demands temporarily strengthen.

More efficient use of funds

As Table 1 indicates, agricultural banks tend to be operated at substantially lower loan/deposit ratios than the nation's larger banks. Consequently, rural bankers have listened to many speeches telling them how to recognize or create loan opportunities. Much of the difference between the average loan/deposit ratios, however, may really reflect the fact that small rural banks must maintain greater liquidity because of the less diversified nature of both their depositors and their borrowers. Banking resources could be more fully employed if significant diversification were achieved, but in many rural areas now serviced by small banks this could only occur through statewide branching or holding company affiliation. If in such ways large banks came to service these rural areas, the supply of loanable

Table 1. Loan/deposit ratios on June 30, 1961-1973

Year	All insured commercial banks	Agricultural banks: banks at which the ratio of farm loans to total loans is--	
		25 to 49 per cent	50 per cent or more
	Total loans as percentage of total deposits 1/		
1961	54.3	46.9	45.7
1962	54.7	47.2	46.1
1963	58.3	48.8	49.0
1964	61.7	51.3	51.1
1965	64.7	52.4	51.8
1966	66.7	53.7	53.5
1967	66.1	55.3	56.1
1968	66.6	54.6	55.5
1969	71.3	54.9	54.6
1970	70.8	56.0	56.7
1971	65.4	54.4	55.8
1972	67.0	55.1	55.7
1973	71.7	56.2	54.6

1/ Loans are gross loans less reserves for bad debts; deposits are total deposits less cash items in process of collection.

Table 2. Banks, deposits, and farm loans, June 30, 1961-1973

Year	All insured commercial banks	Agricultural banks: banks at which the ratio of farm loans to total loans is--	
		25 to 49 per cent	50 per cent or more
	A. Number of banks		
1961	13,023	3082	3311
1962	13,085	3091	3277
1963	13,192	3102	3250
1964	13,396	3107	3177
1965	13,529	3122	3006
1966	13,554	3093	2929
1967	13,527	3054	2894
1968	13,514	3078	2878
1969	13,468	3088	2666
1970	13,482	3022	2600
1971	13,550	2946	2567
1972	13,672	2955	2480
1973	13,842	2973	2368
	B. Total deposits (billions of dollars)		
1961	182.7	11.2	7.1
1962	200.0	12.1	7.5
1963	264.6	13.2	8.2
1964	283.4	13.8	8.5
1965	309.6	14.4	8.4
1966	337.1	16.1	9.0
1967	358.7	16.9	9.5
1968	392.7	19.0	10.3
1969	423.9	19.9	10.8
1970	431.1	21.1	11.2
1971	501.3	22.9	12.1
1972	550.0	26.0	13.3
1973	625.1	30.7	15.2

Table 2. Banks, deposits, and farm loans, June 30, 1961-1973 (continued)

Year	All insured commercial banks	Agricultural banks: banks at which the ratio of farm loans to total loans is--	
		25 to 49 per cent	50 per cent or more
	C. Total farm loans (billions of dollars)		
1961	7.1	1.9	2.2
1962	7.8	2.1	2.3
1963	8.9	2.3	2.7
1964	9.8	2.5	2.9
1965	10.4	2.7	2.9
1966	11.5	3.1	3.2
1967	12.5	3.3	3.6
1968	13.6	3.7	3.8
1969	14.6	3.9	3.9
1970	15.2	4.2	4.2
1971	16.1	4.5	4.5
1972	18.1	5.1	4.9
1973	21.1	6.1	5.4

funds in these areas could also be enhanced by the access that these banks would have to money markets.

In most areas, however, changes in banking structure that are significant enough to have these effects would result in banks that have a primarily urban base. To maintain an optimum deployment of loanable funds between the rural and urban sectors they service, it appears that such banks would nevertheless have to maintain equal expertise in lending to both areas.

Another part of the seeming liquidity at rural banks represents funds absorbed by balances maintained in correspondent banks as the traditional way of paying for services rendered by the correspondents. For all member banks that are located outside of SMSA's in States such as Texas and Oklahoma, these correspondent balances represent over 8 per cent of their deposits. In other areas, such as the Northern Plains States, the ratio is much lower--below 4 per cent. In general, however, this method of payment for correspondent services removes funds from banks that must largely rely on local deposit growth, and moves the funds to larger, less isolated banks that often have alternative sources of nonlocal funds in money markets. Those rural banks with local credit demands pressing against their resources should naturally examine closely the present amount of their implicit payment for correspondent services, and might consider seeking correspondent arrangements that permit former correspondent balances to be invested in local loans, with the earnings to be used to pay for correspondent services.

Table 3. Average annual growth rates of deposits and farm loans, 1961-67 and 1967-73

Period and item	All insured commercial banks	Agricultural banks: banks at which the ratio of farm loans to total loans is--	
		25 to 49 per cent	50 per cent or more
	Average annual increase (per cent)		
1961-67			
Deposits.....	11.9	7.1	5.0
Farm loans.....	10.0	10.0	8.6
1967-73			
Deposits.....	9.7	10.4	8.1
Farm loans.....	9.1	10.5	7.2

Note: Calculated from data in Table 2. Periods start and end on June 30.

Caution: Because the population of agricultural banks changes over time as the loan portfolios of individual banks change sufficiently to include or exclude them from this group, growth rate comparisons for these banks in Table 2 should be restricted to comparisons between deposits and farm loans in the same column and for the same time period.

Nonlocal sources of funds

Sale of money-market instruments. Of the array of rural banking problems, the attention of the Federal Reserve System has been most attracted to the disadvantage at which small banks presently find themselves in national money markets. Because of present institutional arrangements in the main financial markets, small banks are largely unable to tap these markets directly for the benefit of the areas and sectors--mainly rural areas and the farm sector--that they primarily service. This deficiency is of concern to the Federal Reserve System, which needs financial markets that are sufficiently perfect to distribute the impact of monetary policy actions rapidly and equitably throughout the economy.

Money-market investors prefer instruments that have known safety of principal, high liquidity, and low cost of handling. From their point of view, the financial condition of most small banks is unknown, and most of the instruments that these banks typically hold or could issue do not meet their requirements.

Banker's acceptances. However, there is one class of money-market instruments--banker's acceptances--which, because they represent actual credits extended by banks, are often written in fairly small amounts, in odd amounts, and with various maturities. If small banks were to write their larger loans in the form of acceptances, they would not differ materially from some already being created and traded. Instead of signing a promissory note, the borrower would sign an order to pay a stated amount on a

specified future date, drawn on the bank extending the credit. This draft becomes an "acceptance" if and when the bank chooses to undertake an obligation to make payment, which it does by stamping "accepted" on the face of the instrument. By assuming primary liability for payment, the bank has created an instrument that it can offer in money markets, perhaps through brokers in such paper.

Before investors will purchase such acceptances, however, they must regard them as absolutely safe from default. Most investors do not possess such knowledge about rural banks in the requisite degree of certainty, and thus they would refrain from buying their paper. However, the issuing bank's money-market correspondent will in most cases have sufficient knowledge about the smaller bank to be willing to purchase the acceptance at a reasonable discount, endorse it to make it as marketable as its own acceptances, and then sell it to investors.[1/] With this type of assistance from a correspondent bank, banker's acceptances could develop into a source of money-market funds for even relatively small rural banks.

In addition, when a correspondent bank takes the overline portion of a large loan originated by a rural bank, that part of the loan could be written in the acceptance form. By knowing that it can sell this instrument either immediately or later if a need for funds arises, the correspondent bank may be more willing to provide this participation credit service to rural banks.

1/ Revised October 22, 1973, to reflect the requirements of Interpretation 1560 of the Board of Governors, issued in 1921.

Until recently, it was generally thought that acceptances of the type that would arise in most lending by rural member banks--known as "working capital" acceptances or "finance bills"--were subject to per-customer and aggregate limitations on amounts that could be issued. An interpretation issued by the Board of Governors in May, 1973, removed this restraint. At the same time, the Board moved to apply reserve requirements against funds raised in this way, with the reserves to be identical to those required against large time certificates of deposit. While this raised the cost of these funds to those banks, primarily large institutions, that had already been raising money through these acceptances, it also cleared away regulatory reservations about expanded sales of acceptances. Those who have been studying rural banking now hope that the small banks which have been unable to raise funds by issuing large negotiable certificates of deposit will be able to sell acceptances through the ways outlined above.

Fund-raising intermediaries. The marketing, with the assistance of correspondent banks, of a single type of asset such as banker's acceptances would still leave rural banks considerably removed from having attained general and reliable access to money-market funds. Since the paper of small banks presently fails to meet the important market requirements, development of such access apparently requires that an intermediary be interposed between such banks and the market, to endow the paper offered by small banks with the qualities required by the market or to convert the paper to more marketable forms.

There is some possibility that a group of rural banks could themselves form such an intermediary, possibly a regional organization that might primarily tap regional sources of funds. Such an organization might, for instance, raise funds by selling commercial paper and use the proceeds to purchase farm loans made by the participating banks. A bill presently before Congress (S.1884, 93rd Congress) would allow member banks to participate in the capitalization of jointly-owned agricultural credit corporations.

Establishment of the larger and more general intermediary required to tap the principal money markets may be beyond the ability of rural banks acting in concert. Most likely, assistance from a governmental agency would be required. The Congress, for instance, might be persuaded to establish an intermediary to raise money-market funds for small banks, patterned after the Federal Intermediate Credit Banks that perform this function for production credit associations, or after the Federal Home Loan Bank that raises money-market funds for savings and loan associations. Or, an existing organization such as the Federal Reserve System could conceivably perform this function. In one of its simpler forms, the intermediary could assemble and pool special time deposit certificates issued by participating banks and periodically conduct an auction of large-denomination participations in the pool of these certificates. Given appropriate management of this operation, money-market investors would likely deem these participations to possess the characteristics of safety

and size that they seek, and a secondary market in them would undoubtedly develop to provide liquidity. An arrangement along these lines appears to offer excellent prospects for bridging the present gap between rural bank paper and the requirements of the major financial markets, but substantial private and governmental effort would be required to make it a reality.

The Federal Reserve discount window

The general principles that governed administration of the Federal Reserve discount window were formulated, in the early 1950's, against the backdrop of heavily liquid positions at almost all banks. The intent of the guidelines, therefore, was to limit the amount of credit available at the discount window, particularly during periods of monetary restraint. The restrictive attitude also applied to the issue of borrowing for seasonal purposes, where the position taken was that member banks should handle their portfolios in ways that would allow them to meet foreseeable seasonal swings from their own resources.

As already noted, however, by the mid-1960's many banks had exhausted their excess secondary reserves. In this new environment, a Federal Reserve study committee concluded that portfolio adjustment problems were more frequent and serious and that greater use of the discount window for short-term and seasonal reserve needs should be encouraged, particularly by banks that lacked access to money market sources of funds. To accomplish this objective, the committee recommended a fundamental change in the administration of

the window. Most borrowing would be done under either a "basic" or "seasonal" borrowing privilege. The qualifications for borrowing under each of these privileges would be clearly stated, as would the rules governing the amount and term of borrowing. Therefore, after specific arrangements had been concluded with the Federal Reserve Bank, a member bank would know precisely how much discount credit it could assuredly obtain over the coming year, and it could therefore make its lending and portfolio adjustment plans accordingly.

The new seasonal borrowing privilege. After much further study of its potential impact and of the administrative procedures it would entail, a seasonal borrowing privilege was implemented on April 19, 1973. To be considered for seasonal discount credit, a member bank must "lack reasonably reliable access to national money markets." Such a bank's seasonal need for funds is defined as the need "arising from a combination of expected patterns of movement in its deposits and loans." For the 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 discount 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 4 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,

Table 4. Illustration of a Bank's Potential Seasonal Credit Need

Month	Seasonal pattern		Net fund availability		Potential seasonal borrowing[1/]
	Average deposits	Average loans	Total (deposits less loans)	Difference from peak month	
	(millions of dollars)				
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.

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.

At many banks, the amount of seasonal variation in local loans may be obscured because the bank may sometimes hold its secondary reserves in the form of loan instruments such as sales of Federal funds or purchases of commercial paper. In addition, some banks make seasonal loans to local governments that for reporting purposes are classified as securities rather than loans. Some banks may sell seasonal loans to their correspondents. These and similar factors may be taken into account in calculating the true seasonal need, and should be brought to the attention of the Reserve Bank's loan officer.

Potential impact 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, on the basis of monthly-average data on total loans and deposits that were available at the Federal Reserve Board for the period 1968-1972. No adjustments such as those described above were made. For purposes of these estimates, banks with deposits up to $250 million were considered. The amount of seasonal variation in net fund availability at each bank was calculated through application of a well-known statistical process designed for such tasks. Within the limitations

inherent in these procedures, 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 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.

An estimated 1,930 banks qualify for the seasonal borrowing privilege during some period of the year. As indicated in Table 5, this number represents 14 per cent of all insured commercial banks and 34 per cent of all member banks. However, agricultural banks are far more likely to qualify. For instance, at banks at which farm loans constitute at least one-half of all loans outstanding, 68 per cent qualify for seasonal borrowing.

A different measure of the incidence of the new privilege is the proportion of total bank loans that are made by the banks that qualify. As also shown in Table 5, this ratio stands at 8 per cent for all member banks, but at 59 per cent for those most heavily involved in farm lending. Thus, it turns out that qualifying banks hold 27 per cent of all farm loans outstanding at member banks.

Over the year as a whole, potential seasonal borrowing averages $591 million. The peak month is June, when 1,311 banks qualify to borrow $883 million, and the low month is January with potential borrowing of $188 million at 397 banks.

Table 5. Potential impact of the seasonal borrowing privilege

Group of banks	Total	Agricultural banks: banks at which the ratio of farm loans to total loans is--	
		25 to 49 per cent	50 per cent or more
	Percentage of banks potentially qualifying		
Insured commercial banks	14	15	19
Member banks	34	44	68
	Percentage of bank loans at the qualifying banks		
Insured commercial banks	6	16	22
Member banks	8	34	59
	Percentage of bank farm loans at the qualifying banks		
Insured commercial banks	15	16	22
Member banks	27	35	60
	Potential seasonal borrowing as a percentage of outstanding loans		
Insured commercial banks:			
Annual average	.16	.56	1.03
Peak month	.49	1.49	2.64
Member banks:			
Annual average	.21	1.19	2.75
Peak month	.61	3.17	7.06
Qualifying banks:			
Annual average	2.61	3.53	4.66
Peak month	7.59	9.43	11.99

The annual average potential seasonal borrowing is very small when compared with total outstanding loans at member banks--only 0.21 per cent of that total. Thus, even maximum use of the privilege would have relatively minor impact on over-all lending by banks. However, Table 5 shows that the potential impact is much greater when seasonal borrowing is compared to the loan volume of the qualifying banks only, and even more so when one examines only the agricultural banks that qualify. The peak month's potential borrowing for individual qualifying banks averages 12 per cent of total loan volume at the banks most heavily involved in farm lending.

As these data demonstrate, the new seasonal borrowing privilege can be a very significant source of nonlocal funds for rural banks that experience substantial seasonal variations in deposits or loan demand. The Federal Reserve System has put much effort into designing and implementing this new program, and it is hoped that all banks that qualify and that have a local need for these additional funds will not hesitate to apply for and obtain them for the benefit of their communities.

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