

Annotated charts and tables

THE FEDERAL RESERVE SEASONAL BORROWING PRIVILEGE

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THE FEDERAL RESERVE SEASONAL BORROWING PRIVILEGE

I. Rationale and Administrative Guidelines

RATIONALE

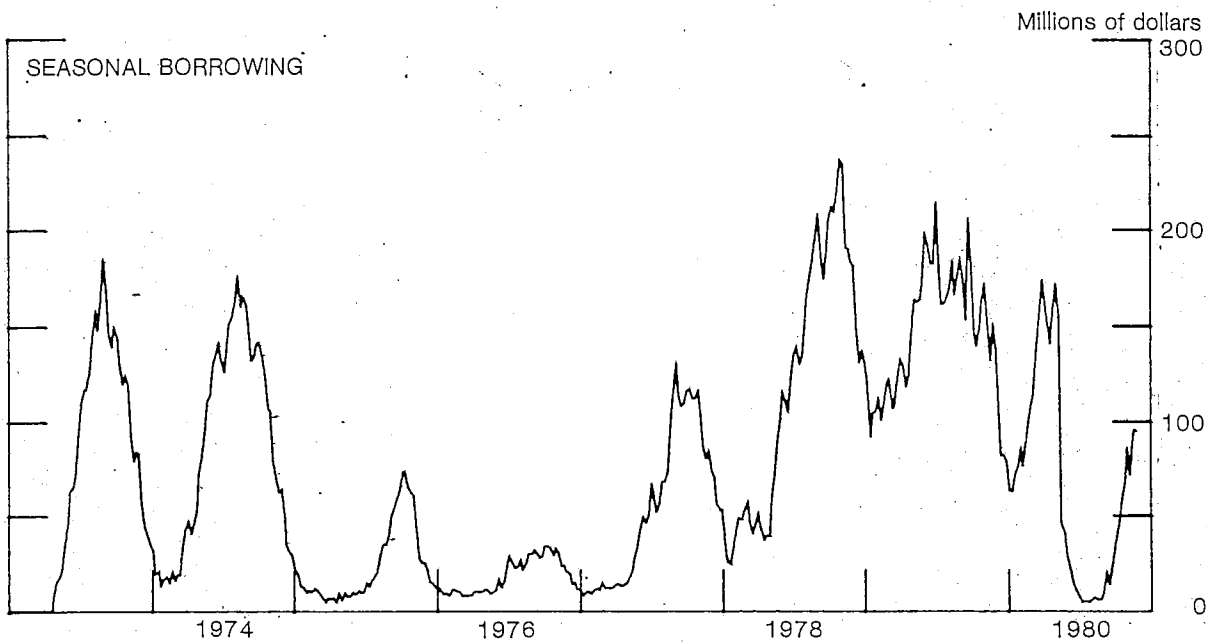
Small banks lack reliable access to external sources of funds that large banks can tap to supplement their resources. As a result, credit services to their communities may be relatively impaired. For example, if a bank must plan to meet recurring seasonal outflows from its own resources, the total credit it provides over the course of a year will probably be less than if it could plan on using external funds to meet part of such outflows. A reappraisal of the discount mechanism undertaken in the 1960's recommended that the discount window be used to provide seasonal funds to small banks that lack reliable access to national money markets.

The seasonal borrowing privilege was implemented on April 19, 1973. The regulation and guidelines were revised in August 1976.

GUIDELINES

	<u>1973</u> <u>(original)</u>	<u>1976</u> <u>(current)</u>
Normal eligibility:	Banks with deposits under \$100 million	Banks with deposits under \$500 million
	Other banks with deposits under \$250 million that lack established access to money market funds	
Qualifying seasonal outflow:		
Amount must exceed:	5 percent of average deposits	4% of first \$100 million 7% of next \$100 million 10% of average deposits over \$200 million
Length of at least:	8 consecutive weeks	4 consecutive weeks
Policy toward sale of federal funds:	Only temporary sales of small amounts to avoid excess reserves	Can continue normal pattern of sales

The analyses and conclusions are those of the author and do not necessarily represent those of the Board of Governors or of other members of its staff.



II. Potential Seasonal Borrowing, 1973-1979

A qualifying seasonal outflow arises from a combination of expected patterns of movement in a bank's deposits and loans.

To measure seasonal outflow and potential seasonal borrowing:

Net fund availability is defined as deposits minus loans;

Amount of outflow equals the reduction in net fund availability from its annual peak;

Potential seasonal borrowing equals the amount of seasonal outflow that exceeds qualifying thresholds specified for amount and minimum duration (see Guidelines, page 2).

Each year from 1973 to 1979, potential seasonal borrowing was calculated for each eligible member bank for which several years of data on monthly deposit and loan movements were available. Tabulations and analyses of these data indicate that:

Seasonality at banks has been declining (Table 1);

Relatively more agricultural banks have qualifying seasonals (Table 1);

Small banks, agricultural banks, and banks in the Northeast, Upper Midwest, and Far West are more likely to have qualifying seasonals (Chart 2);

Potential relative importance of seasonal borrowing has been declining, though it was temporarily enhanced by the 1976 guidelines change (Table 2);

Potential seasonal borrowing is relatively insignificant in aggregate, but fairly significant to borrowing banks (Table 2);

The value of seasonal borrowing may be best reflected by peak-month borrowing--the sum of amounts borrowed during the peak month of borrowing at each bank, regardless of the calendar month in which that peak occurred (Table 2);

Among qualifying banks, the relative amount of potential seasonal borrowing tends to be greater at small banks and at heavily agricultural banks (Chart 3);

Potential relative importance of seasonal borrowing at agricultural banks is large enough to have a noticeable impact on the rural economy, especially during peak outflow periods (Table 3).

Table 1

Potential qualification for seasonal borrowing

	Original guidelines		Current guidelines	
	1973	1976	1976	1979
Qualifying banks:				
Number.....	1,931	1,478	2,729	2,310
As a percentage of--				
All member banks.....	34	25	47	41
Nonagricultural banks.....	25	20	41	39
Moderately agricultural banks...	44	32	54	47
Heavily agricultural banks.....	68	50	74	54
Loans at qualifying banks as a percentage of loans at all member banks:				
Total loans.....	8.1	6.4	13.5	11.1
Farm loans.....	26.6	19.2	36.0	27.5

Chart 2

Estimated net influences on the percentage of banks qualifying
for seasonal borrowing, 1979

National average = 43 percent

Percentage points subtracted or added by--

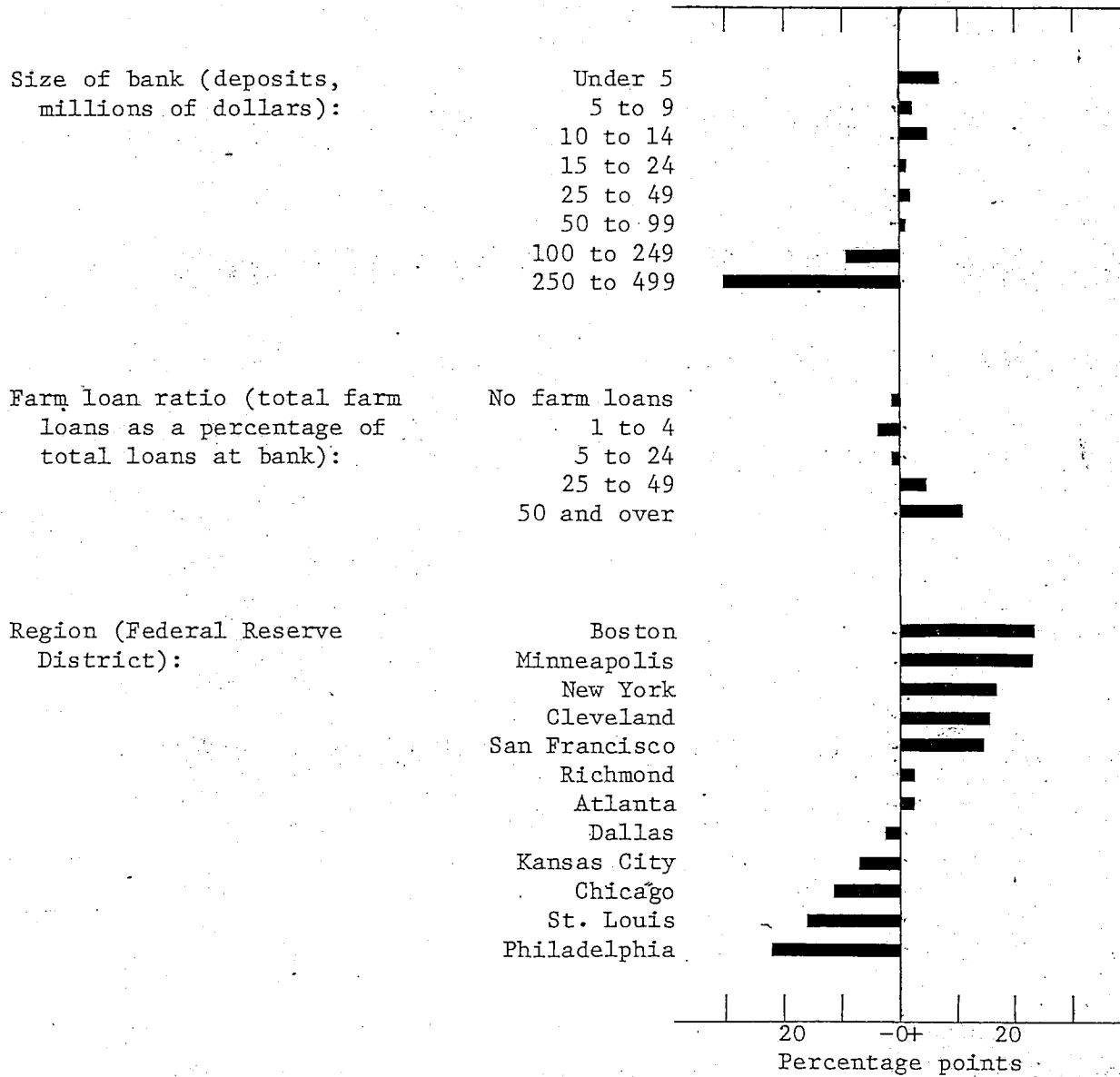


Table 2

Potential seasonal borrowing

	Original guidelines		Current guidelines	
	1973	1976	1976	1979
<u>Amount (millions of dollars)</u>				
Annual average.....	597	506	736	587
Peak month.....	1,732	1,589	2,389	2,066
<u>As a percentage of loans at all member banks</u>				
Annual average.....	.21	.13	.19	.12
Peak month.....	.61	.41	.62	.41
<u>As a percentage of loans at borrowing banks</u>				
Annual average.....	2.6	2.0	1.4	1.1
Peak month.....	7.6	6.4	4.6	3.7
<u>Duration of borrowing</u>				
Average (months).....	5	5	4	4

Chart 3

Estimated net influences on relative amount of potential seasonal borrowing, 1979
(Potential seasonal borrowing / Total loans)

National average = 1.6 percent

Percentage points subtracted or added by--

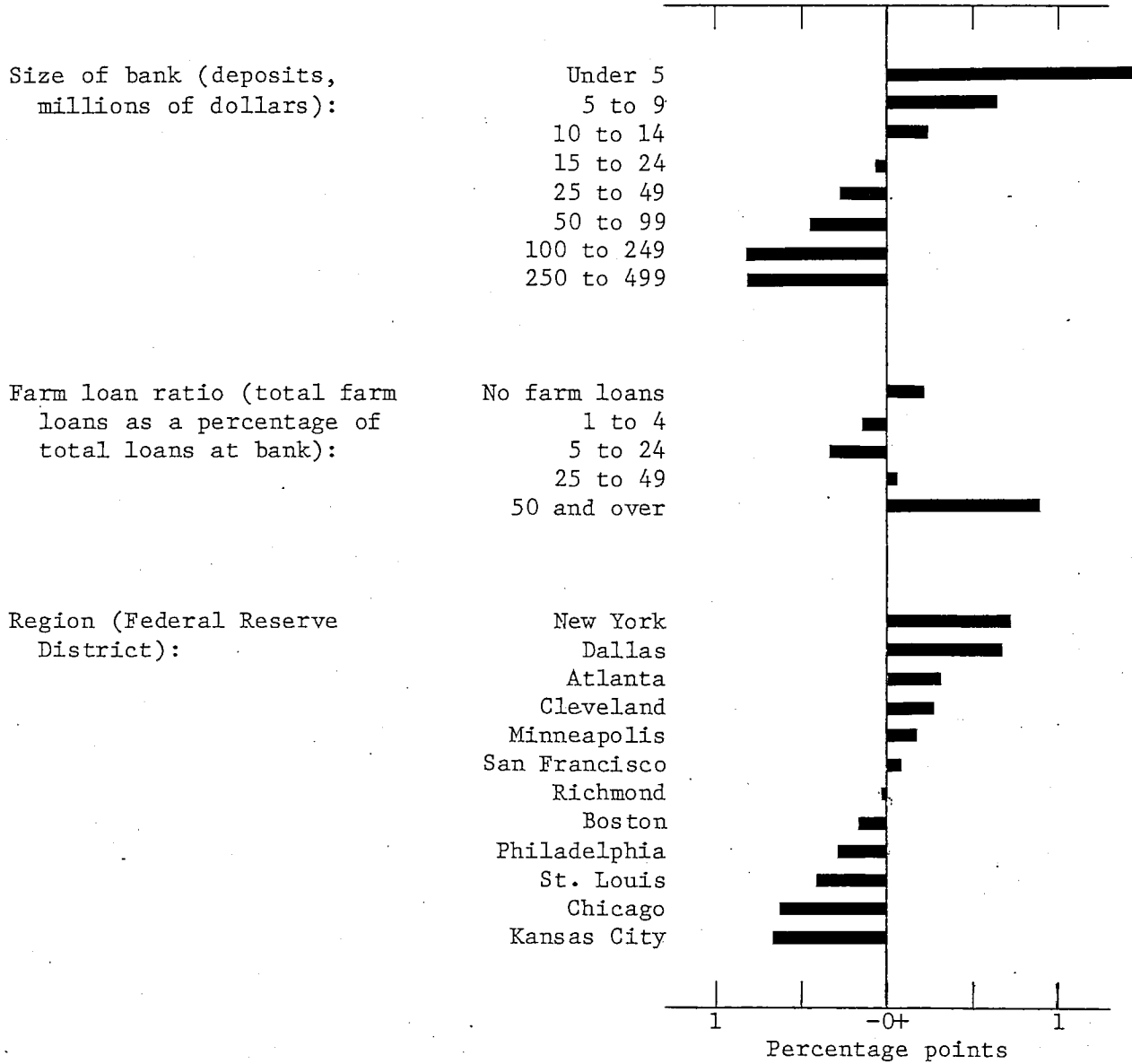


Table 3

Potential importance of seasonal borrowing, by farm loan ratio of bank

Farm loan ratio of bank*	Original guidelines		Current guidelines	
	1973	1976	1976	1979
POTENTIAL SEASONAL BORROWING AS A PERCENTAGE OF LOANS AT ALL MEMBER BANKS				
<u>Annual-average borrowing</u>				
Nonagricultural banks.....	.2	.1	.2	.1
Moderately agricultural banks.....	1.2	.6	.9	.5
Heavily agricultural banks.....	2.7	1.4	1.8	1.1
<u>Peak-month borrowing</u>				
Nonagricultural banks.....	.5	.3	.6	.4
Moderately agricultural banks.....	3.2	1.9	2.7	1.6
Heavily agricultural banks.....	7.1	3.9	5.1	3.0

POTENTIAL SEASONAL BORROWING AS A PERCENTAGE OF LOANS AT QUALIFYING BANKS

<u>Annual-average borrowing</u>				
Nonagricultural banks.....	2.3	1.9	1.2	1.0
Moderately agricultural banks.....	3.5	2.3	1.9	1.3
Heavily agricultural banks.....	4.7	3.7	2.7	2.2
<u>Peak-month borrowing</u>				
Nonagricultural banks.....	7.0	6.1	4.2	3.6
Moderately agricultural banks.....	9.4	7.3	5.7	4.2
Heavily agricultural banks.....	12.0	10.0	7.5	6.0

* Banks are classified by their ratio of total farm loans to total loans, as follows:

Under 25 percent.....Nonagricultural
 25 to 49 percent.....Moderately agricultural
 50 percent and over.....Heavily agricultural

III. Seasonal Borrowing in 1979

In 1979, 482 banks borrowed an annual average of \$144 million and a peak-month total of \$786 million. Tabulations and analyses of these data show that:

The number of borrowing banks was equal to one-fifth, annual-average borrowing to one-fourth, and peak-month borrowing to nearly two-fifths of the estimated potential (Table 4);

Relative importance of borrowing to borrowing banks equalled the estimated importance on an annual-average basis, and exceeded it on on peak-month basis (Table 4);

Thus actual borrowing was relatively insignificant on an aggregate basis, but of significance to borrowing banks (Table 4);

Among banks for which potential seasonal qualification had been indicated, the larger banks, agricultural banks, less liquid banks, and banks qualifying for relatively greater borrowing were more likely to have actually borrowed (Chart 4);

However, the most important factor associated with the incidence of borrowing was the Federal Reserve District in which the banks were located, with relatively little seasonal borrowing in the Chicago and Cleveland Districts (Chart 4);

In the Chicago District, seasonal discount credit was probably provided under another name, but in the Cleveland District seasonal and other discount credit was probably less readily available than elsewhere;

Ownership of a bank by a holding company had no significant net association with the incidence of borrowing (Chart 4);

Agricultural banks accounted for a minority of borrowing banks and amounts borrowed, but realized a larger proportion of their estimated potential (Table 5);

Seasonal borrowing was far more important to the rural than to the nonfarm economy, and somewhat more important to agricultural than to nonagricultural borrowing banks, though the latter banks realized larger proportions of their estimated potential (Table 6).

Table 4

Seasonal borrowing, actual and potential, 1979

	Actual	Potential	Actual as percent of potential
<u>Borrowing banks</u>			
Number.....	482	2,310	21
<u>Loans at borrowing banks (billions of dollars, September 1978)</u>			
Total loans.....	14.1	55.5	25
Farm loans.....	2.1	5.2	40

SEASONAL BORROWING

	<u>Amount (millions of dollars)</u>		
Annual average.....	144	587	25
Peak month.....	786	2,066	38

As a percentage of loans at all member banks

Annual average.....	.03	.12	25
Peak month.....	.16	.41	38

As a percentage of loans at borrowing banks

Annual average.....	1.02	1.06	96
Peak month.....	5.58	3.72	150

Duration of borrowing

Average (months).....	2.67	4	67
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Chart 4

Estimated net influences on the percentage of potentially qualifying banks that actually borrowed, 1979

National average = 15 percent

Percentage points subtracted or added by--

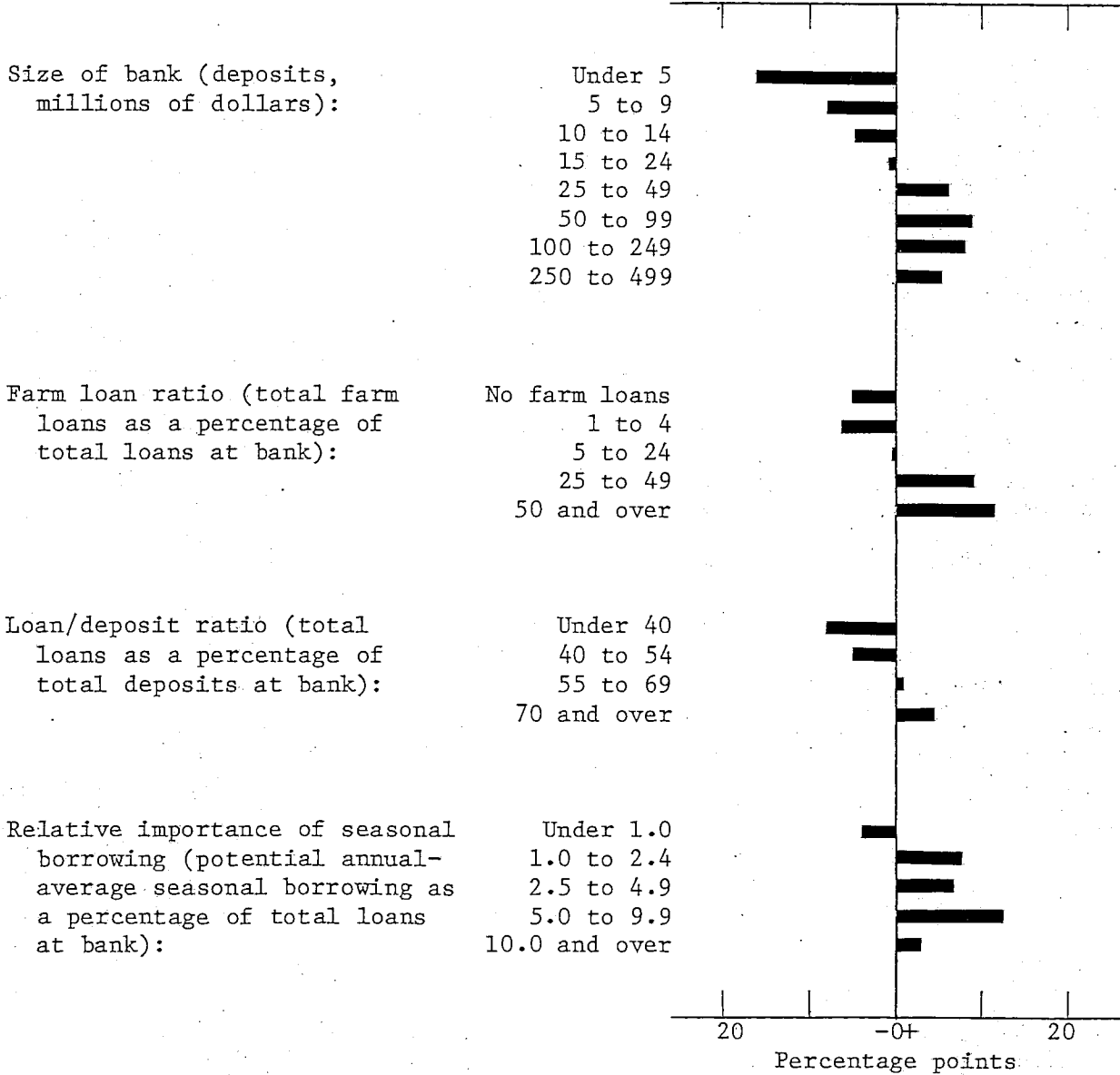


Chart 4 (continued)

National average = 15 percent

Percentage points subtracted or added by--

Ownership of bank:

 Holding company
 Other

Region (Federal Reserve District):

 Boston
 Philadelphia
 Kansas City
 Minneapolis
 St. Louis
 Dallas
 San Francisco
 Richmond
 Atlanta
 New York
 Chicago
 Cleveland

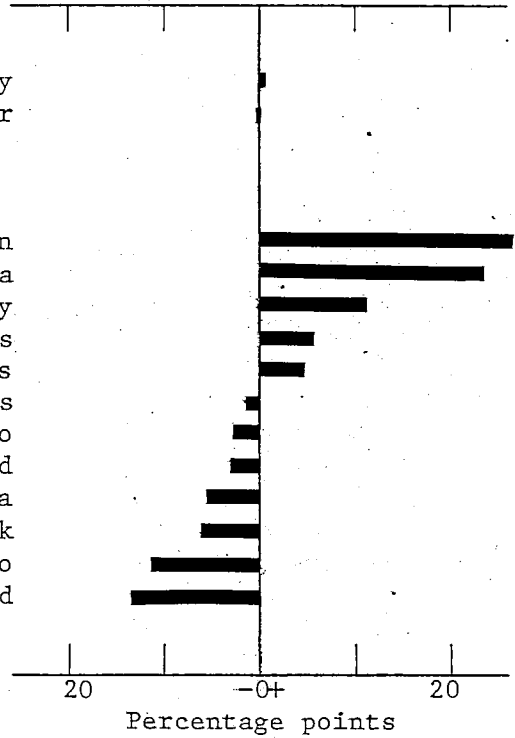


Table 5

Seasonal borrowing, actual and potential, by farm loan ratio of bank, 1979

Farm loan ratio of bank	Actual	Potential	Actual as percent of potential
<u>Number of borrowing banks</u>			
Nonagricultural banks.....	282	1,681	17
Moderately agricultural banks....	112	383	29
Heavily agricultural banks.....	88	246	36
<u>Seasonal borrowing (annual average, millions of dollars)</u>			
Nonagricultural banks.....	102	477	21
Moderately agricultural banks....	26	64	41
Heavily agricultural banks.....	16	45	34

Relative importance of seasonal borrowing, by farm loan ratio of bank, 1979

Farm loan ratio of bank	Actual	Potential	Actual as percent of potential
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SEASONAL BORROWING AS A PERCENTAGE OF TOTAL LOANS AT ALL MEMBER BANKS

<u>Annual-average borrowing</u>			
Nonagricultural banks.....	.02	.09	21
Moderately agricultural banks....	.21	.51	41
Heavily agricultural banks.....	.37	1.08	34

<u>Peak-month borrowing</u>			
Nonagricultural banks.....	.12	.36	34
Moderately agricultural banks....	.96	1.62	60
Heavily agricultural banks.....	1.85	2.95	63

SEASONAL BORROWING AS A PERCENTAGE OF TOTAL LOANS AT BORROWING BANKS

<u>Annual-average borrowing</u>			
Nonagricultural banks.....	1.0	1.0	97
Moderately agricultural banks....	1.1	1.3	85
Heavily agricultural banks.....	1.4	2.2	65

<u>Peak-month borrowing</u>			
Nonagricultural banks.....	5.5	3.6	154
Moderately agricultural banks....	5.2	4.2	123
Heavily agricultural banks.....	7.1	6.0	118

IV. Variations in Total Seasonal Borrowing, 1973-1980

The volume of seasonal borrowing has varied greatly from year to year, though there were no corresponding fluctuations in total potential borrowing; thus, other reasons for the variability must be sought:

Over 1973-1979, borrowing volume was inversely related to the "profit" margin available from borrowing at the discount rate and relending at the typical farm loan rate at small banks, which does not provide a logical explanation for observed variations in borrowing (Chart 5);

Greater seasonal borrowing in general occurred during periods in which bank liquidity was being reduced and banks were presumably progressively less able to meet seasonal outflows from their own resources (Chart 6);

However, seasonal borrowing volume did not respond as one might have expected to the severe liquidity pressure on small banks--especially agricultural banks--in 1976 and 1977, which tends to indicate that they had access to other external funds during this period in which large banks were not yet under liquidity pressure (Chart 6);

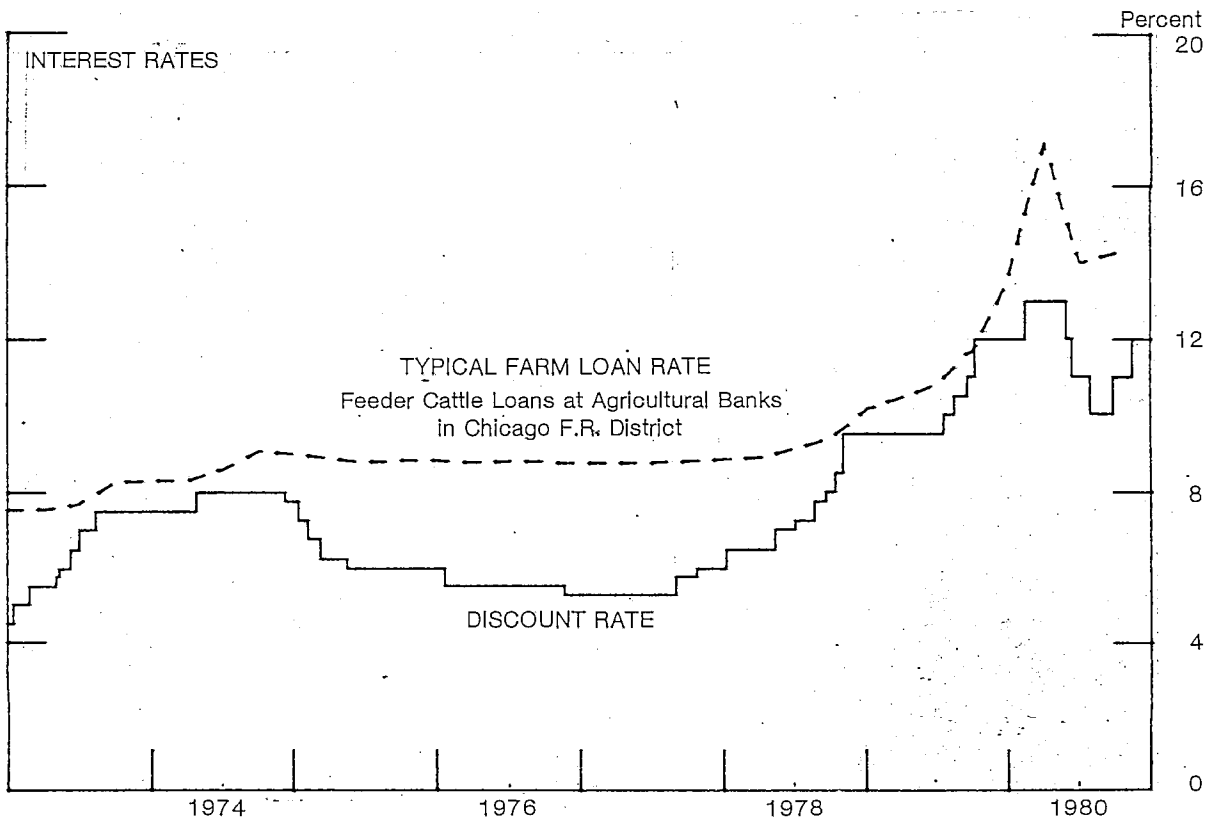
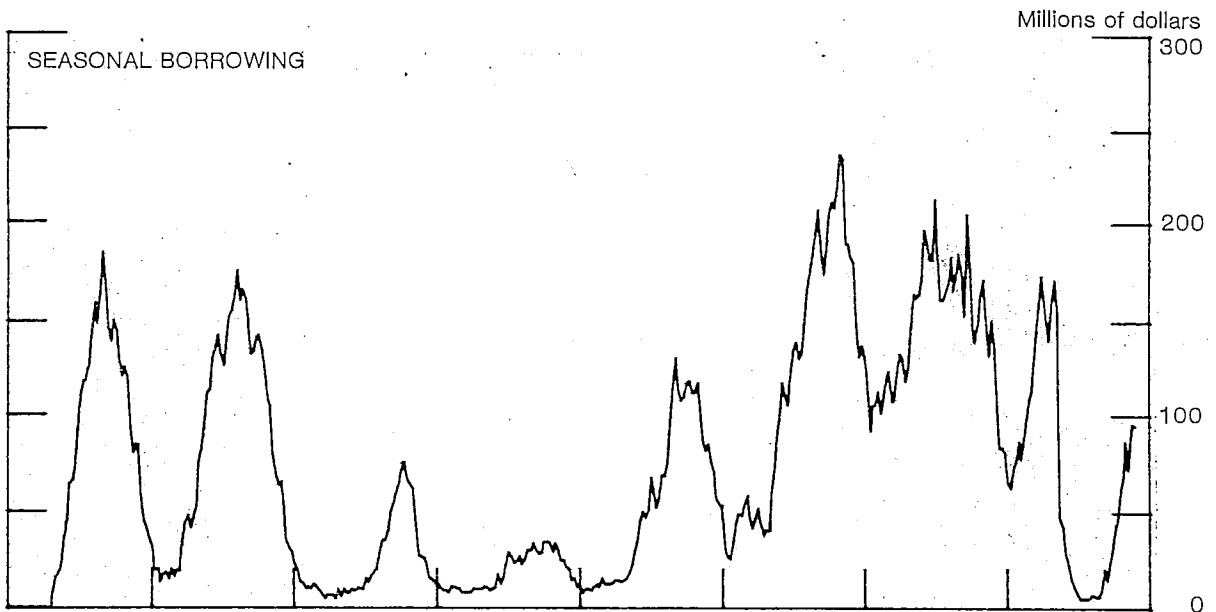
Significant amounts of seasonal borrowing have occurred only during periods in which the discount rate has been below money-market rates such as the federal funds rate, and in addition changes in the relationship between these rates are closely associated with changes in the volume of seasonal borrowing during 1975-1977 and again in 1980 (Chart 7);

Thus small banks undoubtedly had access to other sources of funds during 1975-1977, a period of general monetary ease;

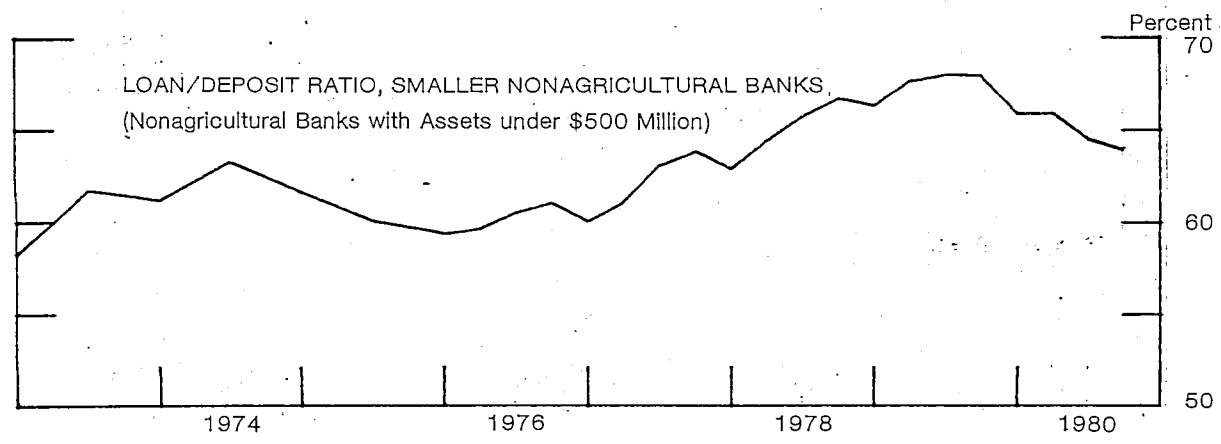
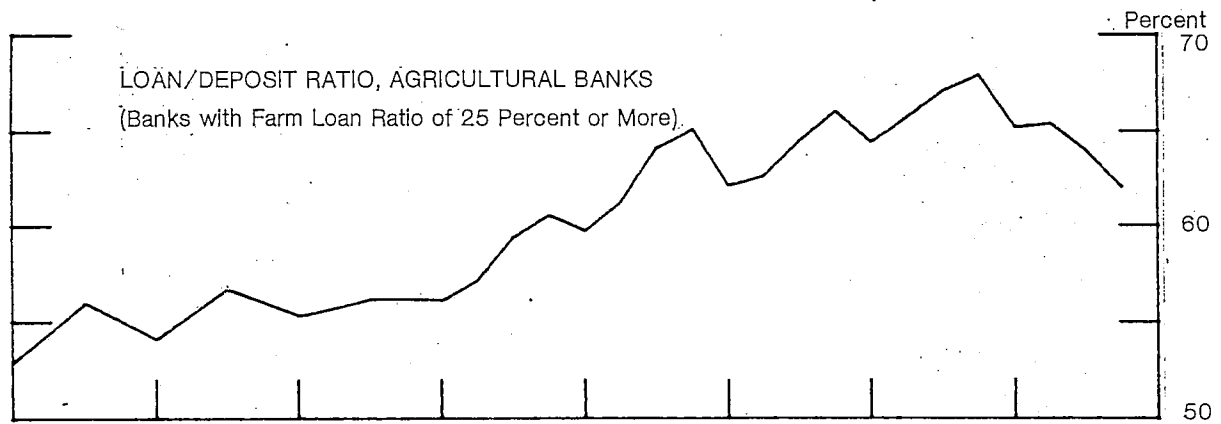
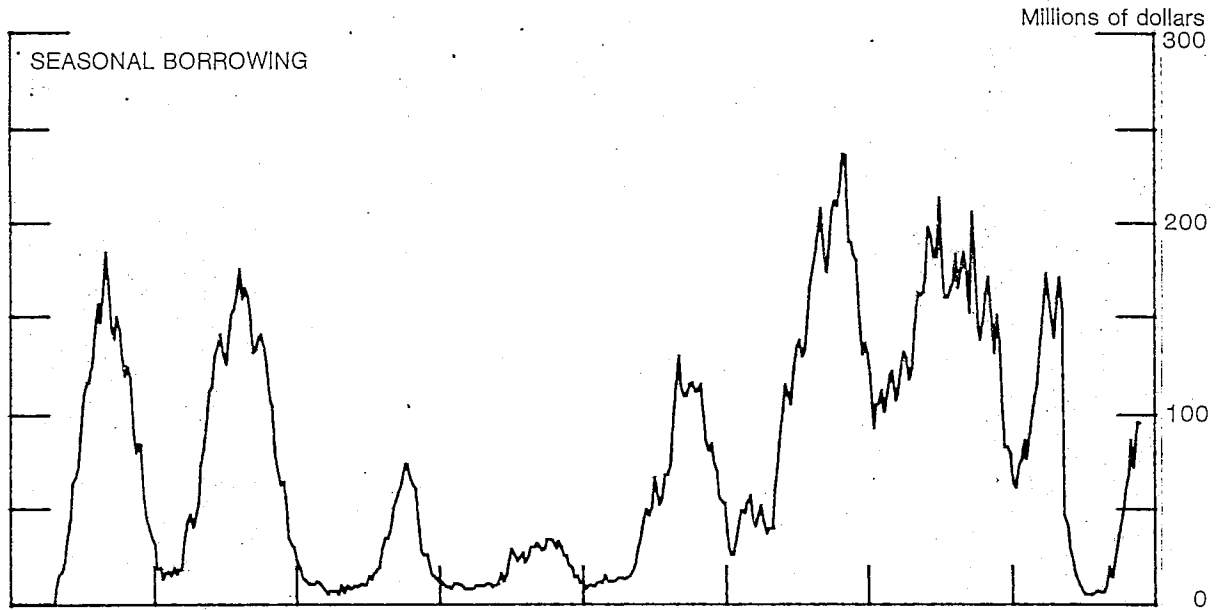
Since the discount rate was kept below the federal funds rate during periods of monetary restraint, these data do not indicate whether banks using seasonal borrowing would have had access to these other sources throughout such periods;

The advent of money-market certificates of deposits has introduced a significant cyclical element into loan rates at small banks, thus for the most part removing, as of 1980, the profitability considerations that may have constrained use of seasonal borrowing as well as of money-market sources of funds during earlier periods of monetary restraint (Chart 8).

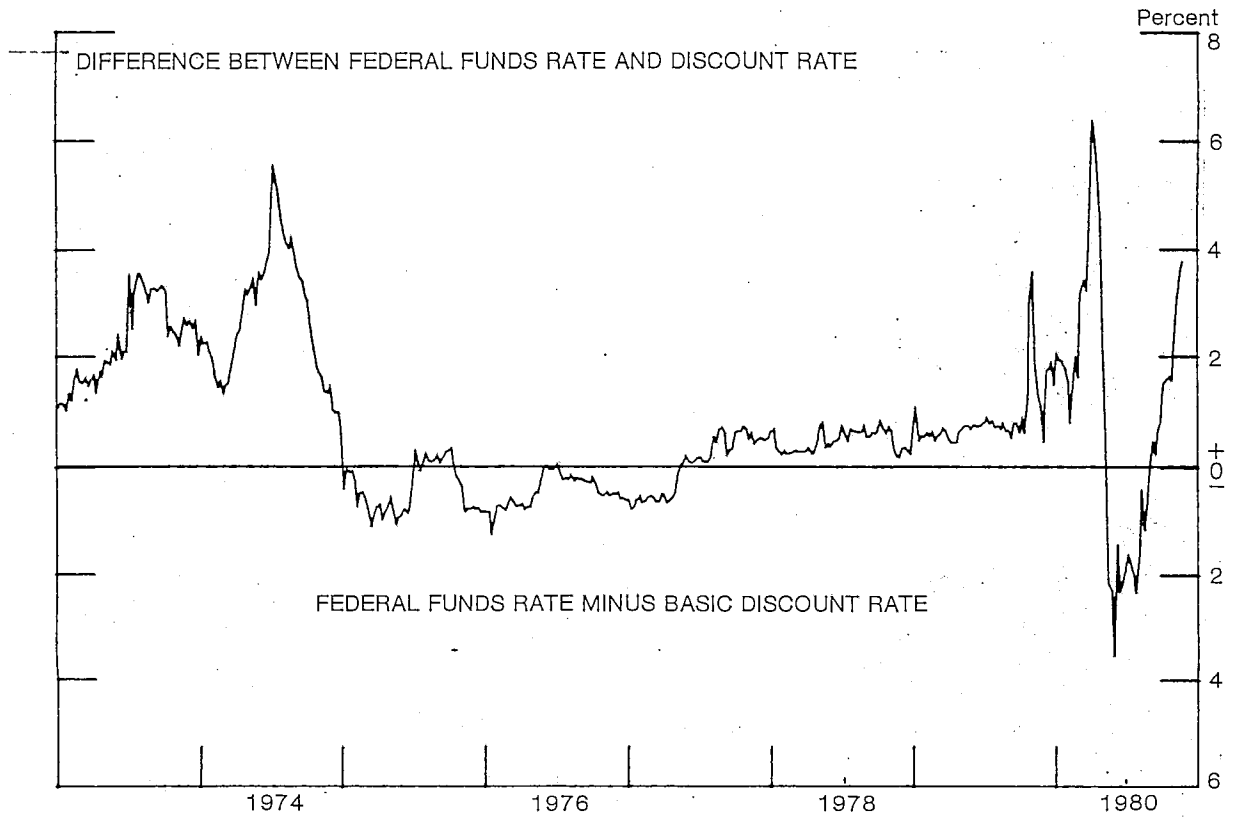
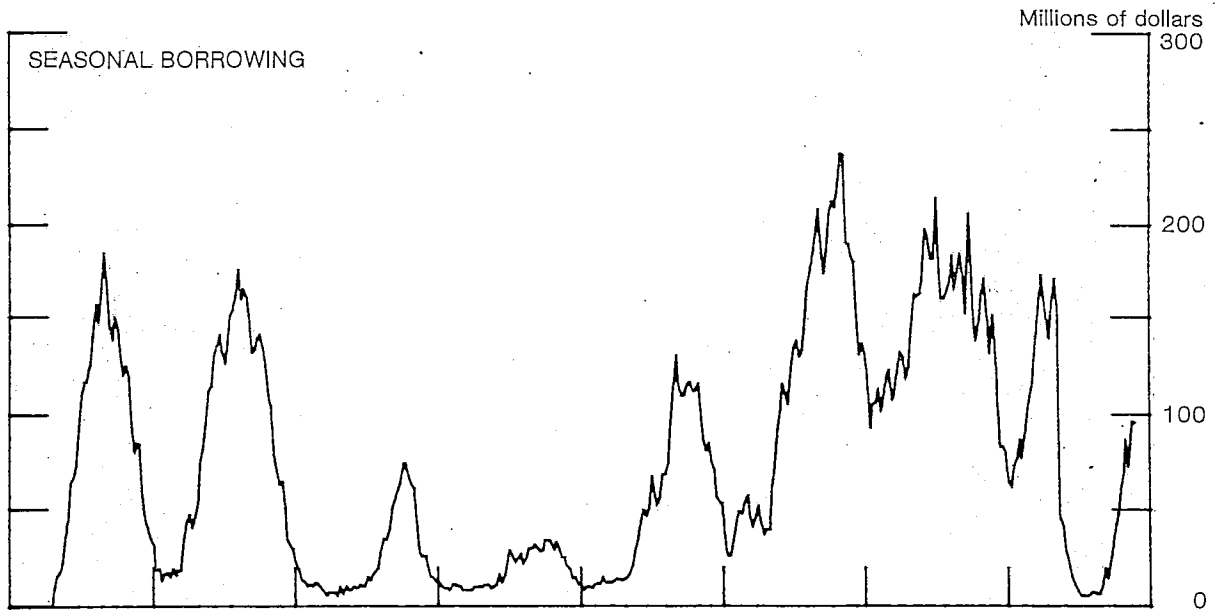
Seasonal Borrowing Compared with Banks' Margin on Farm Loans Made with Borrowed Funds



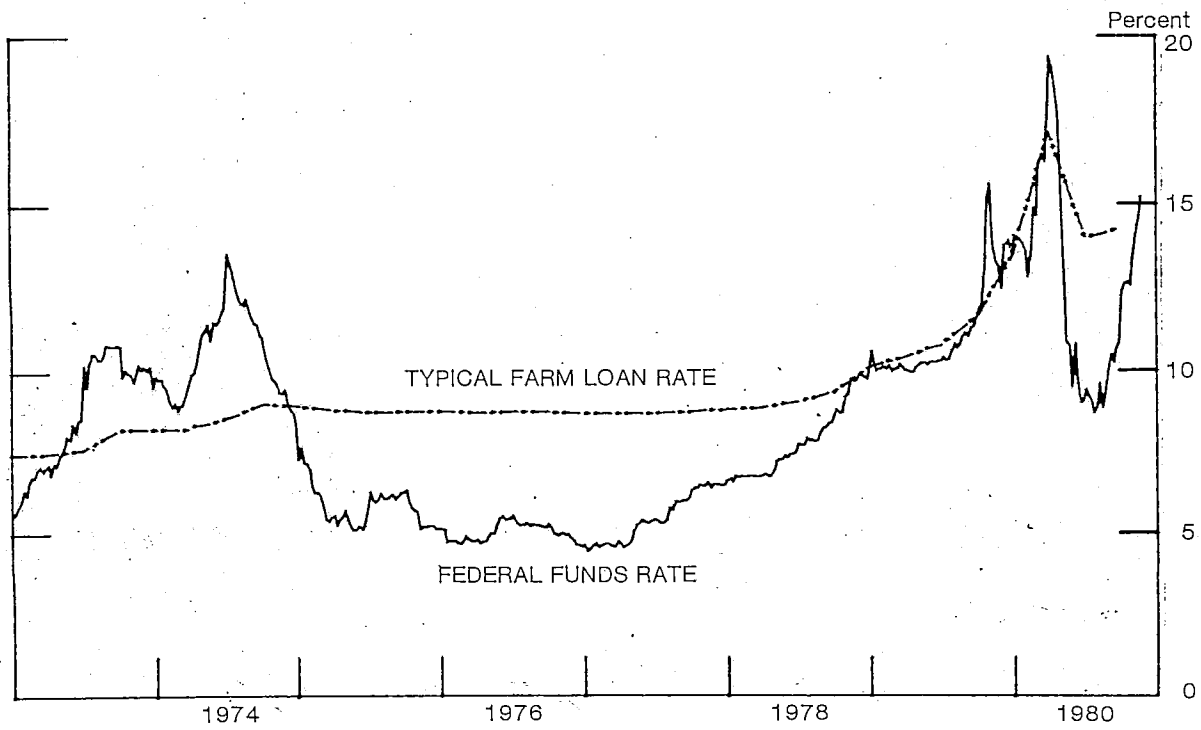
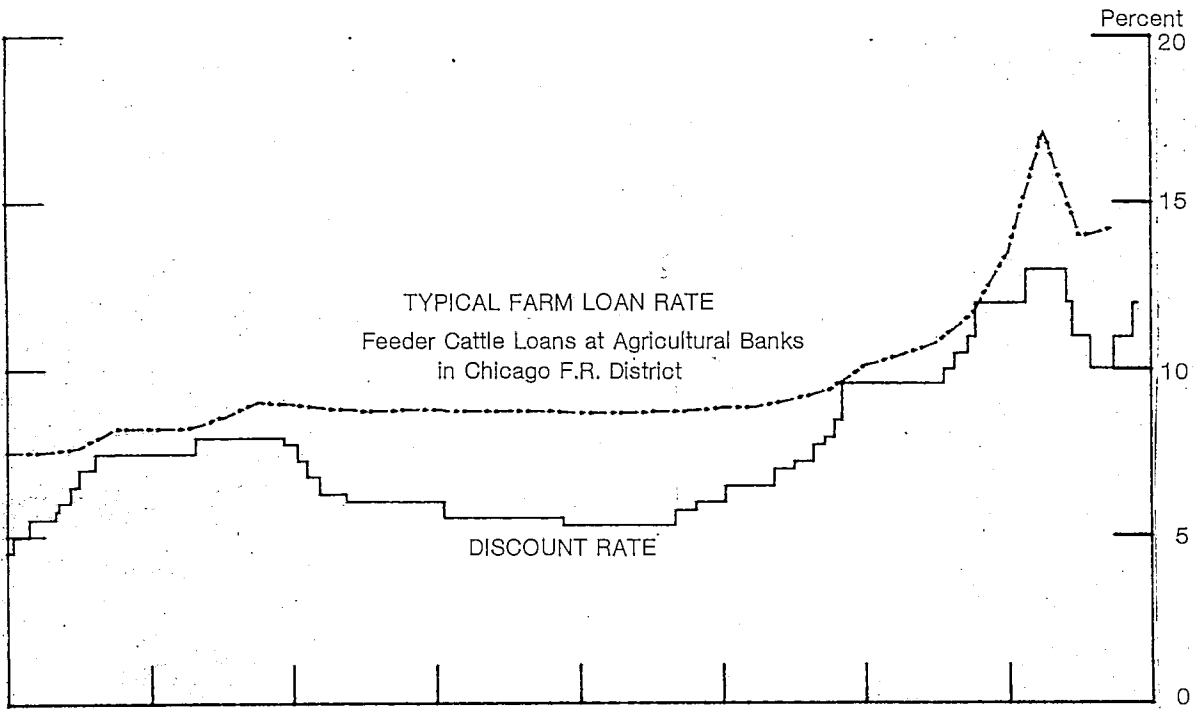
Seasonal Borrowing Compared with Bank Liquidity



Seasonal Borrowing Compared with Relative Cost of Borrowed Funds



Farm Loan Interest Rates Compared with Rates on Borrowed Funds



Appendix Table 1

Seasonal borrowing, actual and potential, by Federal Reserve District, 1979

Federal Reserve District	Actual	Potential	Actual as percent of potential
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Number of borrowing banks

1--Boston.....	53	108	49
2--New York.....	14	118	12
3--Philadelphia.....	17	39	44
4--Cleveland.....	6	245	2
5--Richmond.....	17	163	10
6--Atlanta.....	28	248	11
7--Chicago.....	10	272	4
8--St. Louis.....	36	109	33
9--Minneapolis.....	88	347	47
10--Kansas City.....	150	317	47
11--Dallas.....	55	280	20
12--San Francisco.....	8	64	13

Seasonal borrowing (annual average, millions of dollars)

1--Boston.....	17	29	58
2--New York.....	3	63	4
3--Philadelphia.....	12	18	70
4--Cleveland.....	1	50	2
5--Richmond.....	7	33	20
6--Atlanta.....	17	114	15
7--Chicago.....	3	35	8
8--St. Louis.....	8	14	59
9--Minneapolis.....	23	92	25
10--Kansas City.....	32	47	69
11--Dallas.....	18	76	24
12--San Francisco.....	3	17	19

Appendix Table 2

Seasonal borrowing, by month and by Federal Reserve District, 1979

F. R. District	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	<u>Number of borrowing banks</u>											
1--Boston.....	17	25	34	36	34	27	23	6	8	9	10	8
2--New York.....	5	5	7	5	3	1	-	2	2	2	2	2
3--Philadelphia.....	7	10	10	13	14	14	12	5	3	-	1	2
4--Cleveland.....	1	1	-	2	3	3	3	3	2	2	-	-
5--Richmond.....	2	3	6	10	11	12	11	8	4	3	2	2
6--Atlanta.....	7	1	1	-	4	8	10	17	18	19	14	8
7--Chicago.....	2	2	3	5	6	7	7	5	5	2	4	4
8--St. Louis.....	3	5	6	7	13	16	17	19	13	12	6	2
9--Minneapolis.....	5	6	11	21	36	43	55	60	52	39	25	12
10--Kansas City.....	20	19	33	29	50	54	57	57	67	78	73	44
11--Dallas.....	21	11	12	15	25	25	18	20	14	20	16	10
12--San Francisco.....	3	4	3	2	4	4	2	1	1	1	-	-

Borrowing banks as a percentage of all member banks

1--Boston.....	10	14	19	20	19	15	13	3	5	5	6	5
2--New York.....	2	2	3	2	1	*	-	1	1	1	1	1
3--Philadelphia.....	3	4	4	6	6	6	5	2	1	-	*	1
4--Cleveland.....	*	*	-	*	1	1	1	1	*	*	-	-
5--Richmond.....	1	1	2	3	3	3	3	2	1	1	1	1
6--Atlanta.....	1	*	*	-	1	1	2	3	3	3	2	1
7--Chicago.....	*	*	*	1	1	1	1	1	1	*	*	*
8--St. Louis.....	1	1	1	2	3	4	4	5	3	3	1	*
9--Minneapolis.....	1	1	2	4	7	8	11	12	10	8	5	2
10--Kansas City.....	3	2	4	4	6	7	7	7	8	10	9	6
11--Dallas.....	3	2	2	2	4	4	3	3	2	3	2	1
12--San Francisco.....	2	3	2	1	3	3	1	1	1	1	-	-

Seasonal borrowing (monthly average, millions of dollars)

1--Boston.....	11	34	42	31	34	22	6	2	3	5	4	5
2--New York.....	6	3	6	9	2	*	-	*	1	3	1	*
3--Philadelphia.....	15	23	23	26	26	20	8	5	3	-	*	1
4--Cleveland.....	2	2	-	1	1	1	2	2	1	1	-	-
5--Richmond.....	6	7	6	10	7	11	11	8	4	3	4	4
6--Atlanta.....	17	2	1	-	3	12	16	25	30	40	37	22
7--Chicago.....	*	2	4	4	5	6	3	2	3	1	1	2
8--St. Louis.....	2	2	1	5	11	13	11	17	14	16	6	*
9--Minneapolis.....	3	6	6	9	23	31	45	58	46	23	15	6
10--Kansas City.....	12	12	14	22	30	36	38	39	46	50	56	33
11--Dallas.....	26	16	12	12	20	27	27	16	18	17	19	8
12--San Francisco.....	3	7	6	5	7	7	*	2	1	*	-	-

* Less than 0.5

Appendix Table 3

Seasonal borrowing, by month and by farm loan ratio of bank, 1979

Farm loan ratio of bank	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<u>Number of borrowing banks</u>												
Nonagricultural banks..	67	77	95	104	133	124	112	92	78	85	69	48
Mod. agricultural.....	11	9	18	24	40	55	62	66	61	50	37	21
Heavily agricultural...	15	6	13	17	30	35	40	44	50	52	47	25
<u>Borrowing banks as a percentage of all member banks</u>												
Nonagricultural banks..	2	2	2	2	3	3	3	2	2	2	2	1
Mod. agricultural.....	1	1	2	3	5	7	8	8	7	6	4	3
Heavily agricultural...	3	1	3	4	7	8	9	10	11	12	10	6
<u>Seasonal borrowing (monthly average, millions of dollars)</u>												
Nonagricultural banks..	85	107	109	109	136	136	106	100	73	94	94	56
Mod. agricultural.....	6	4	5	12	20	35	44	54	50	40	27	14
Heavily agricultural...	11	4	7	12	15	14	17	22	25	26	22	12
<u>Annual-average borrowing as a percentage of loans at all member banks</u>												
Nonagricultural banks..	.02	.02	.02	.02	.03	.03	.02	.02	.02	.02	.02	.01
Mod. agricultural.....	.05	.02	.03	.09	.15	.28	.35	.42	.40	.32	.21	.11
Heavily agricultural...	.26	.08	.15	.28	.35	.33	.40	.52	.59	.61	.52	.28

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