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Agricultural Credit Trends and Rural Banking Conditions

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AGRICULTURAL CREDIT TRENDS AND RURAL BANKING CONDITIONS

Agricultural Credit Trends

Farm debt owed to reporting lending institutions rose at a near record rate in the first half of 1979, as well as over the year ending June 30. An extraordinary amount of lending by the Farmers Home Administration (FmHA) figured most prominently in this surge, while loans at life insurance companies and the Farm Credit System also increased sharply. Farm loan volume at commercial banks rose relatively slowly, however, in spite of reports of continued strong farm loan demand at rural banks in most areas.

Table 1 shows that the total increase of \$11.0 billion in farm debt owed to the reporting lenders during the first half of 1979 easily set a new record for that period. Fully \$4 billion of that gain was recorded at the FmHA, where lending under both the disaster and economic emergency loan programs contributed significantly to the expansion.

Total debt thus rose by 10.7 percent over the first six months (the second sharpest first-half rise of the past 15 years), led by the increase of 38.8 percent at FmHA. Loans at life insurance companies continued to expand at about the pace exhibited since the 1977 revival of farm lending at these firms, while Farm Credit System loans rose at roughly a normal rate. However, the first-half increase of 4.9 percent in farm loans at commercial banks was the second lowest of the past 15 years.

For the year ending June 30, Table 2 indicates that the total increase of \$17.5 billion at reporting lenders far exceeds the previous record of \$13.0 billion set last year. In both 1977-78 and 1978-79,

Table 1

Change in farm debt owed to reporting lending institutions

First half of year

Year	Banks	Farm Credit System	Life Insurance Companies	Farmers Home Adm.	Commodity Credit Corporation	Total
<u>Net change (billions of dollars)</u>						
1965.....	1.0	1.0	.3	.4	-.2	2.4
1966.....	.9	1.0	.3	.2	-.3	2.2
1967.....	.9	1.0	.1	.3	-.4	1.9
1968.....	.9	.9	.2	.2	.1	2.3
1969.....	1.2	1.2	.0	.3	-.2	2.4
1970.....	.8	1.1	-.1	.3	-.7	1.4
1971.....	1.4	1.4	-.1	.3	-.9	2.1
1972.....	1.5	1.3	.0	.2	-.6	2.3
1973.....	2.1	1.9	.1	.4	-1.1	3.4
1974.....	1.7	2.5	.1	.4	-.4	4.2
1975.....	1.0	2.7	.2	.8	-.1	4.7
1976.....	2.1	2.7	.3	.4	-.2	5.3
1977.....	3.0	3.2	.7	.8	.4	8.2
1978.....	1.7	2.6	.9	2.6	-.5	7.4
1979.....	1.8	4.5	1.0	4.0	-.2	11.0
<u>Percentage change</u>						
1965.....	10.3	16.8	6.5	20.6	-14.7	10.5
1966.....	8.8	14.5	7.1	9.7	-21.0	8.5
1967.....	7.9	12.0	2.6	11.3	-35.6	6.6
1968.....	7.6	10.1	2.9	9.2	3.9	7.5
1969.....	8.9	11.6	.8	8.9	-7.0	7.1
1970.....	6.0	9.6	-1.8	8.8	-27.3	3.8
1971.....	9.6	10.6	-1.5	8.5	-46.5	5.5
1972.....	8.8	8.8	-.3	5.6	-25.9	5.5
1973.....	11.1	11.9	1.0	10.7	-60.2	7.4
1974.....	7.4	13.1	2.2	9.2	-59.8	8.1
1975.....	4.3	11.5	3.9	19.4	-37.9	8.0
1976.....	8.1	9.9	3.7	8.2	-48.9	8.1
1977.....	10.0	10.4	9.6	13.6	41.9	10.8
1978.....	5.2	7.4	9.8	37.6	-10.8	8.3
1979.....	4.9	11.1	9.3	38.8	-4.8	10.7

lending by the Federal government accounted for over \$5 billion of the total increase. In 1977-78, Commodity Credit Corporation (CCC) crop storage loans soared as major crops again became eligible for this program; in addition, disaster emergency loans at the FmHA rose sharply as a result of 1977 droughts, particularly in Georgia and Iowa.

In 1978-79 FmHA lending rose further as a result of the economic emergency loan program established by the Emergency Agricultural Credit Adjustment Act of 1978. That legislation authorized up to \$4 billion in outstanding loans to farmers with cash flow shortfalls or other financial problems who cannot "obtain sufficient credit from normal credit sources to finance actual needs at reasonable rates and terms due to national or areawide economic stresses, such as general tightening of agricultural credit or an unfavorable relationship between production costs and prices received for agricultural commodities." New lending under this broad and relatively unrestrictive authority is scheduled to terminate in 1980.

In 1977-78, the expansion in CCC and FmHA loans appeared in large part to replace operating credit from commercial banks and the Farm Credit System, as both of the latter lender groups recorded below-average percentage gains in farm loans. Then, during the next 12 months ending in June 1979, Farm Credit System lending revived significantly while bank lending continued to lag. Nevertheless, rural banks participating in Federal Reserve Bank surveys of farm credit conditions continued on average to report exceptionally strong farm loan demand (except in the Dallas District, where easing of demand was recently noted). It seems reasonable to infer, therefore, that the sub-par expansion of farm loans at banks stems in large part from adverse loan availability conditions at many of these institutions.

Table 2

Change in farm debt owed to reporting lending institutions

Year ending June 30

Year	Banks	Farm Credit System	Life Insurance Companies	Farmers Home Adm.	Commodity Credit Corporation	Total
<u>Net change (billions of dollars)</u>						
1965.....	.7	1.0	.5	.3	-.4	2.1
1966.....	.8	.9	.6	.1	-.2	2.1
1967.....	1.0	1.1	.2	.2	-.3	2.2
1968.....	1.1	1.1	.4	.2	.7	3.5
1969.....	.9	1.1	.1	.2	1.0	3.4
1970.....	.5	1.3	-.2	.2	-.5	1.2
1971.....	1.6	1.5	-.1	.2	-.9	2.2
1972.....	1.9	1.4	.0	.1	.7	4.1
1973.....	3.0	2.4	.2	.4	-1.0	5.0
1974.....	3.1	3.8	.4	.3	-.4	7.1
1975.....	.9	4.4	.4	.9	-.1	6.5
1976.....	3.4	3.8	.4	.6	.0	8.1
1977.....	4.5	4.6	1.1	.9	1.3	12.3
1978.....	2.2	3.6	1.6	3.1	2.6	13.0
1979.....	3.3	6.6	1.8	4.8	1.0	17.5
<u>Percentage change</u>						
1965.....	6.9	15.9	12.2	15.1	-24.6	8.8
1966.....	7.9	12.1	12.7	4.4	-17.2	8.3
1967.....	8.9	13.7	4.1	10.0	-31.7	7.9
1968.....	8.8	12.4	6.6	8.0	98.1	11.6
1969.....	7.1	10.5	2.1	8.6	68.3	10.1
1970.....	3.5	11.1	-3.1	6.5	-21.7	3.3
1971.....	10.8	11.8	-1.9	5.2	-48.4	5.8
1972.....	11.6	10.2	.3	2.0	67.2	10.1
1973.....	16.7	15.3	2.8	11.9	-57.4	11.3
1974.....	14.4	21.1	6.8	6.8	-57.7	14.3
1975.....	3.9	20.4	7.3	12.0	-34.4	11.6
1976.....	13.3	14.4	6.6	10.7	-7.6	12.8
1977.....	15.6	15.3	16.2	15.1	684.7	17.2
1978.....	6.7	10.4	19.3	46.9	179.0	15.6
1979.....	9.3	17.5	18.2	50.0	24.6	18.1

Rural Banking Conditions

Banks that are located in rural areas and that are heavily involved in financing agriculture often experience conditions that differ significantly from those at larger and more urban banks. This report discusses liquidity and interest-rate trends at such rural banks, as well as some evidence of the impact of these developments on farm borrowers.

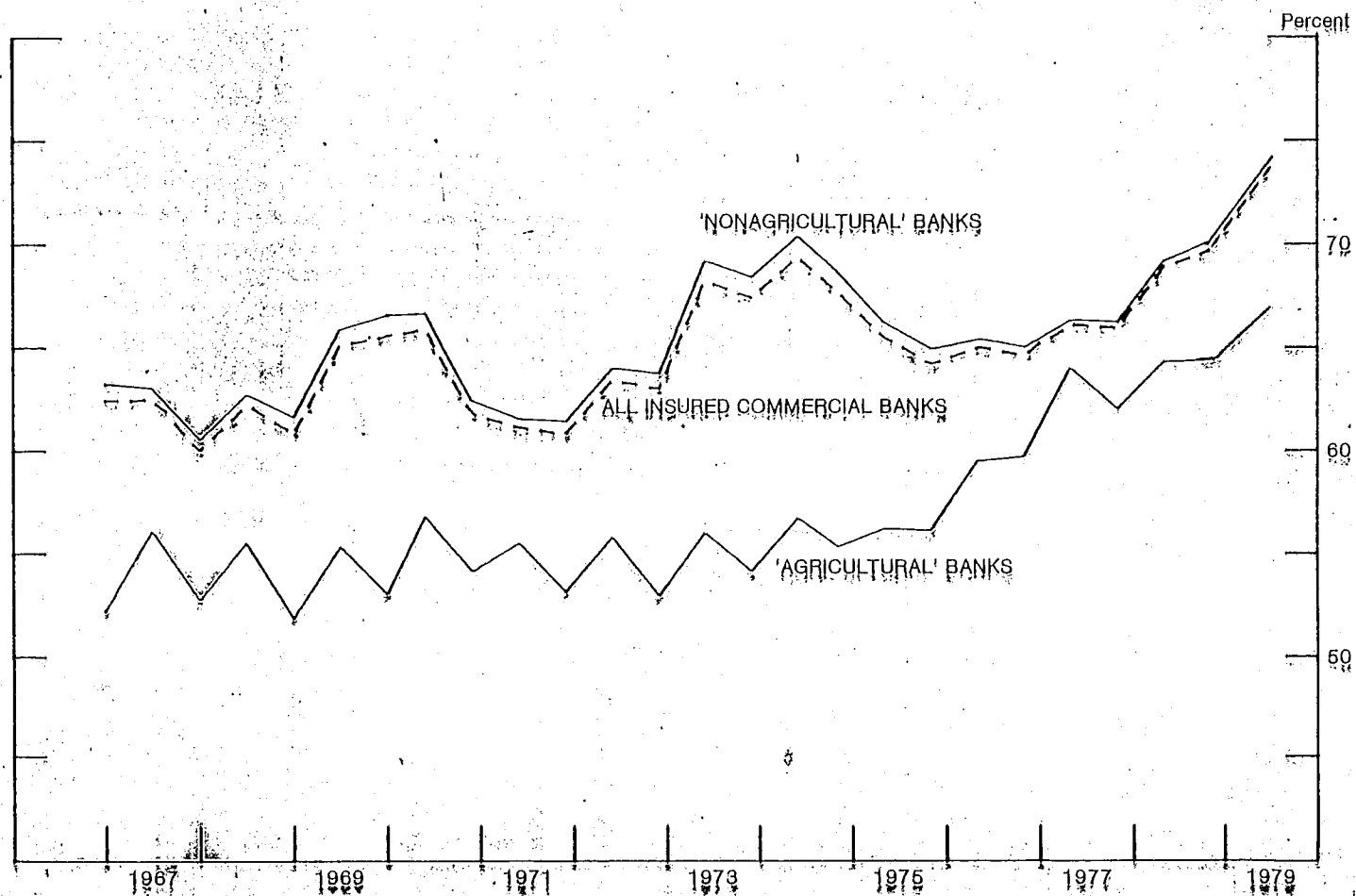
In Chart 1, the average loan/deposit ratio at agricultural banks is compared with that at all other banks. On this chart, agricultural banks are defined as banks at which farm loans represent 25 percent or more of total loans. Nearly one-third of all commercial banks fall into this category, but together they account for only 6 percent of total banking resources; thus their liquidity experience is lost in aggregate banking data which are dominated by the larger, more urban banks. However, these agricultural banks hold 51 percent of all farm loans in the banking system, and so their condition has important implications for farm lending.

The chart shows that the liquidity of agricultural banks was largely unaffected during recent past cycles in the over-all liquidity of the banking system. In 1976 and 1977, however, when adverse farm income developments led to slower rates of deposit growth and of farm loan repayment, the resulting increase in the average loan/deposit ratio at these banks was roughly comparable to that experienced at other banks during the monetary restraint of 1973-74.

Since the summer of 1977 there has been significant improvement in farm income. As yet, however, the trend toward reduced average liquidity at agricultural banks has not been reversed, primarily because deposit growth rates have not risen from the levels to which they fell in 1976 and 1977. Meanwhile, strong demand for both farm and nonfarm

Chart 1

Ratio of Total Loans to Total Deposits* Semiannual



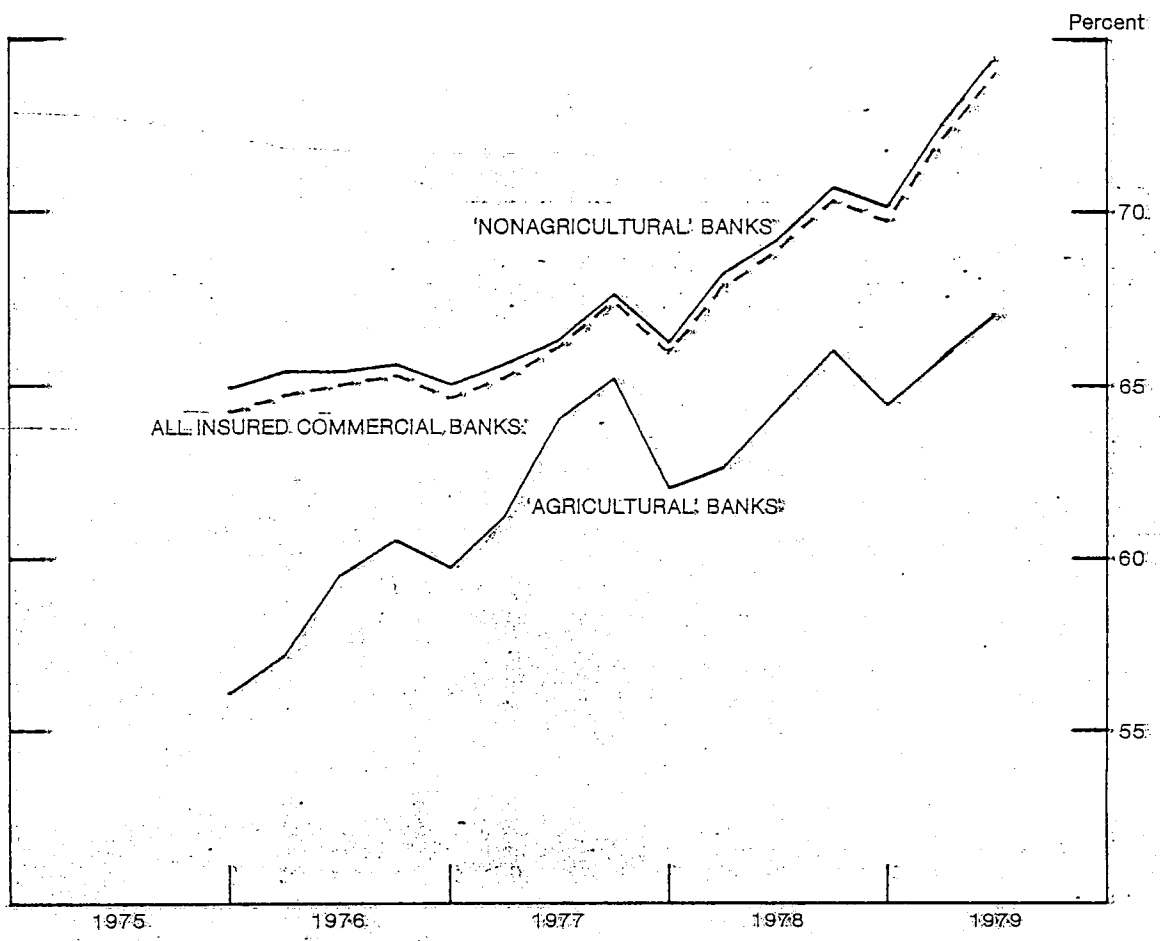
* Data are based on semiannual reports of condition from insured commercial banks.

loans has led total loans to rise faster than deposits, even though farm loan repayment rates have improved,

In Chart 2, the same banking data are shown on a quarterly basis for the more recent period for which quarterly data are available. Since mid-1977 the average loan/deposit ratio has not risen as rapidly at agricultural banks as at other banks, which resembles experience during previous periods of monetary restraint. Nevertheless, after relatively modest seasonal improvement in liquidity last winter, the average loan/deposit ratio at agricultural banks had by June moved up to a new high level of 67 percent, over 10 percentage points above the average mid-year level maintained for many years prior to 1976.

Loan/deposit ratios are indicative of relative liquidity pressure and loan availability at all banks, but particularly at agricultural and other small banks that are generally unable to tap money-market sources of funds on a reliable basis or significant scale. In March 1979, large (\$100,000 or more) time certificates of deposit (both negotiable and nonnegotiable--breakdown is not available) constituted only 5.2 percent of total resources at agricultural banks, compared with 14.7 percent at other banks. These ratios have risen only slightly since the beginning of the adverse liquidity trend at agricultural banks. And, for most agricultural banks and other small banks, the federal funds market remains a place to invest some liquid funds rather than a source of funds. On March 31, 1979, agricultural banks were net sellers of \$1.8 billion in federal funds, equal to 2.5 percent of their total assets, while other banks were net buyers of \$61.1 billion, representing 5.2 percent of their total resources. Relative sales by agricultural banks have declined, however, from earlier levels around 4 percent of total assets. Furthermore, increasing

Chart 2
Ratio of Total Loans to Total Deposits*
Quarterly



* Data are based on quarterly reports of conditions from insured commercial banks.

numbers of agricultural banks have recently become net buyers of federal funds. On March 31, 18 percent were net buyers, up sharply from levels under 10 percent in March of previous years (28 percent of nonagricultural banks were net buyers on March 31). The net purchases of \$485 million by these agricultural banks represented 2.9 percent of their total resources.

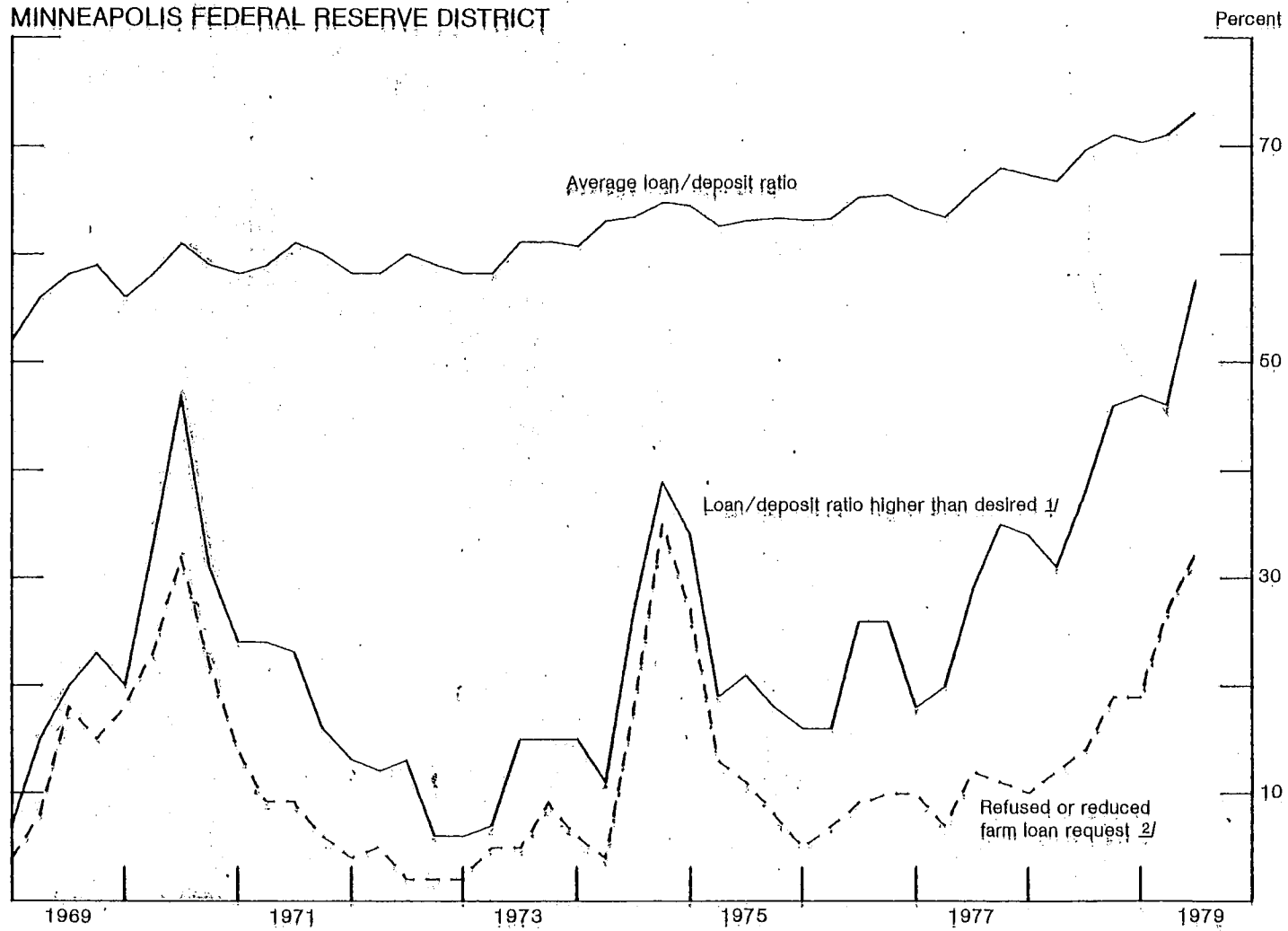
Rural banking conditions often exhibit considerable regional variation which reflects geographical differences in agricultural developments. In each of the four Federal Reserve Districts in which agricultural banks are concentrated, the Reserve Banks conduct quarterly surveys of agricultural credit conditions that reveal such variation and also provide timely insights into the impact of liquidity and other trends on bank lending to farmers.

Chart 3 shows data from the Minneapolis survey, which covers a cross-section of banks involved in farm lending, including some of the larger banks. As shown by the solid lines on the chart, these Ninth District banks as a group reached progressively tighter liquidity positions during the summer and fall of each of the past three years. As of the July 1979 survey, the proportion of banks reporting a "higher than desired" loan/deposit ratio rose above 50 percent for the first time in the history of this survey, which dates back to 1964.

The dashed line on the chart shows that one effect of this condition has been a rise in the proportion of banks that have refused or reduced a farm loan request because of a shortage of funds. Over time, responses to this and other survey questions about loan availability have been highly correlated with bankers' attitudes toward their loan/deposit ratios. Thus 26 percent of the banks expected to encounter problems in meeting normal farm loan requests during the third quarter of 1979, close to the record proportion of 30 percent that reported

Chart 3

Liquidity Conditions at Banks Active in Farm Lending



Source: Survey of Agricultural Credit Conditions, Federal Reserve Bank of Minneapolis.

1/ Percentage of banks reporting that loan/deposit ratio is higher than desired.

2/ Percentage of banks that refused or reduced a farm loan request during the previous quarter because of a shortage of funds.

this condition in October 1974. In July only 34 percent of the banks were actively seeking new farm loan accounts, which also approached the record low set in 1974.

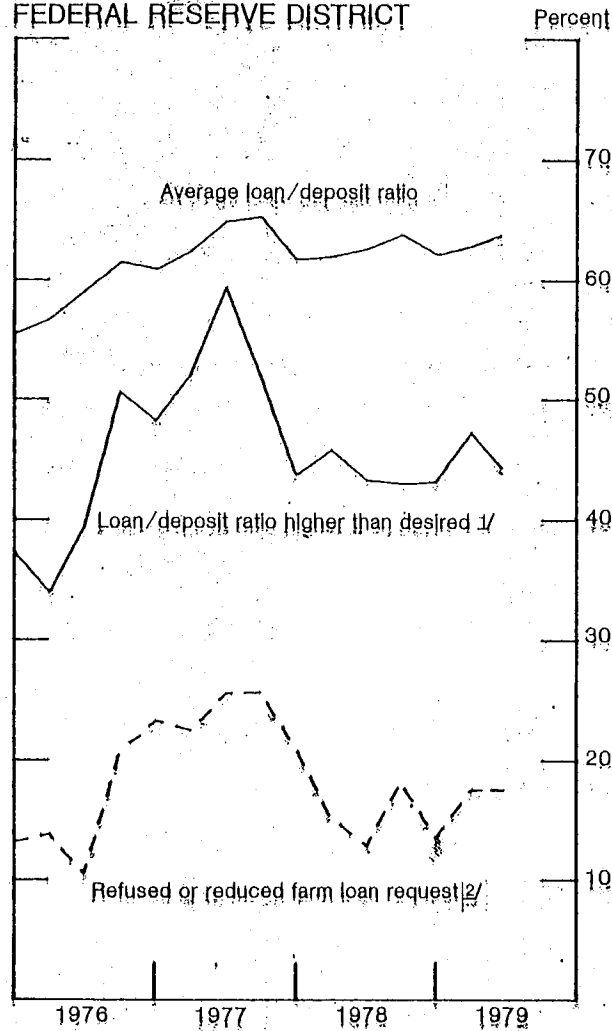
The next chart presents the results of similar surveys initiated more recently by the Federal Reserve Banks of Kansas City and Dallas, which cover primarily banks that are heavily involved in farm lending. In the Kansas City District, liquidity pressures at such agricultural banks mounted after wheat prices collapsed in the fall of 1976, and again when corn prices dropped sharply during the summer of 1977. The subsequent recovery in grain prices, the initiation of Federal payments to wheat producers, and the renewed availability of crop storage loans from the Commodity Credit Corporation combined to relieve liquidity conditions significantly at these banks. But, as the chart indicates, over 40 percent of the banks being surveyed still consider their loan/deposit ratios to be too high. In the July 1979 survey, only 37 percent said they were actively seeking new farm loan accounts, compared with 58 percent at the beginning of 1976.

The right-hand panel of Chart 4 indicates that in the Dallas District agricultural banks on average have somewhat lower loan/deposit ratios than in the more northern Plains States, and that fewer of these banks now feel under liquidity pressure. The smaller role of wheat and corn production in this area helps to explain this experience, as it appears that the liquidity reductions at agricultural banks in other areas were triggered by the financial problems of these grain producers. As of mid-year 1979, these Dallas District banks on average also indicated that farm loan demand was easing and that farm loan repayments were improving, which is contrary to the trends found by the other District surveys. In spite of these developments, however, the proportion of

Chart 4

Liquidity Conditions at Agricultural Banks

KANSAS CITY
FEDERAL RESERVE DISTRICT

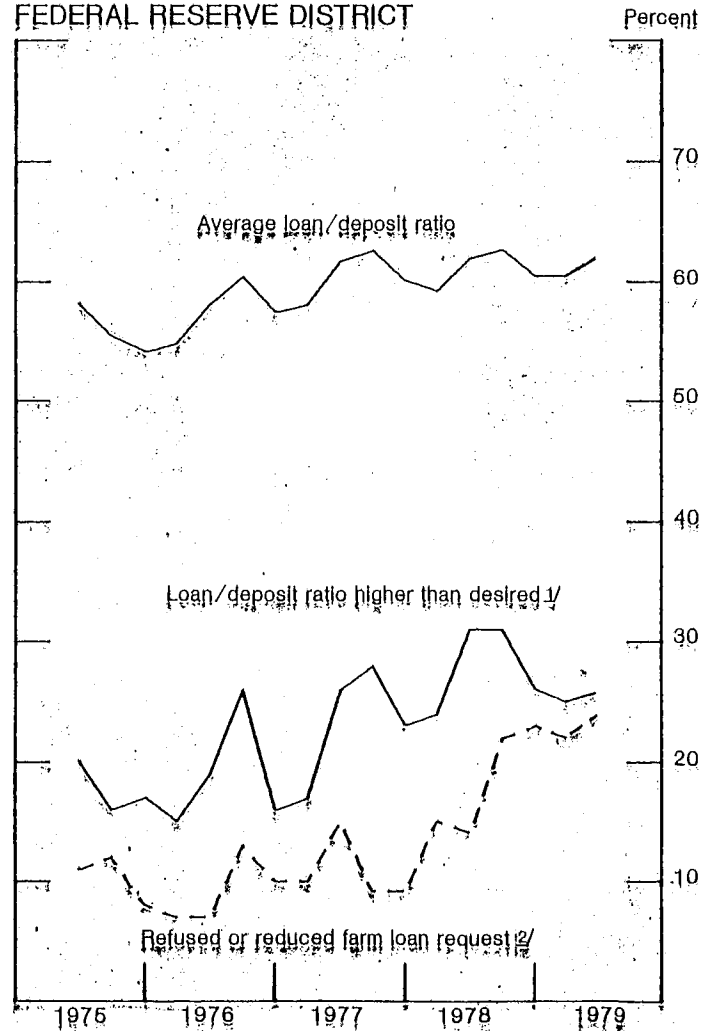


Source: Quarterly Survey of Agricultural Credit Conditions, Federal Reserve Bank of Kansas City.

1/ Percentage of banks reporting that loan/deposit ratio is higher than desired.

2/ Percentage of banks that refused or reduced a farm loan request during the previous quarter because of a shortage of funds.

DALLAS
FEDERAL RESERVE DISTRICT



Source: Quarterly Survey of Agricultural Credit Conditions, Federal Reserve Bank of Dallas.

banks that refused or reduced some farm loan requests because of a fund shortage rose to a new high of 24 percent in the second quarter, and only one-third of the banks reported actively seeking new farm loan accounts.

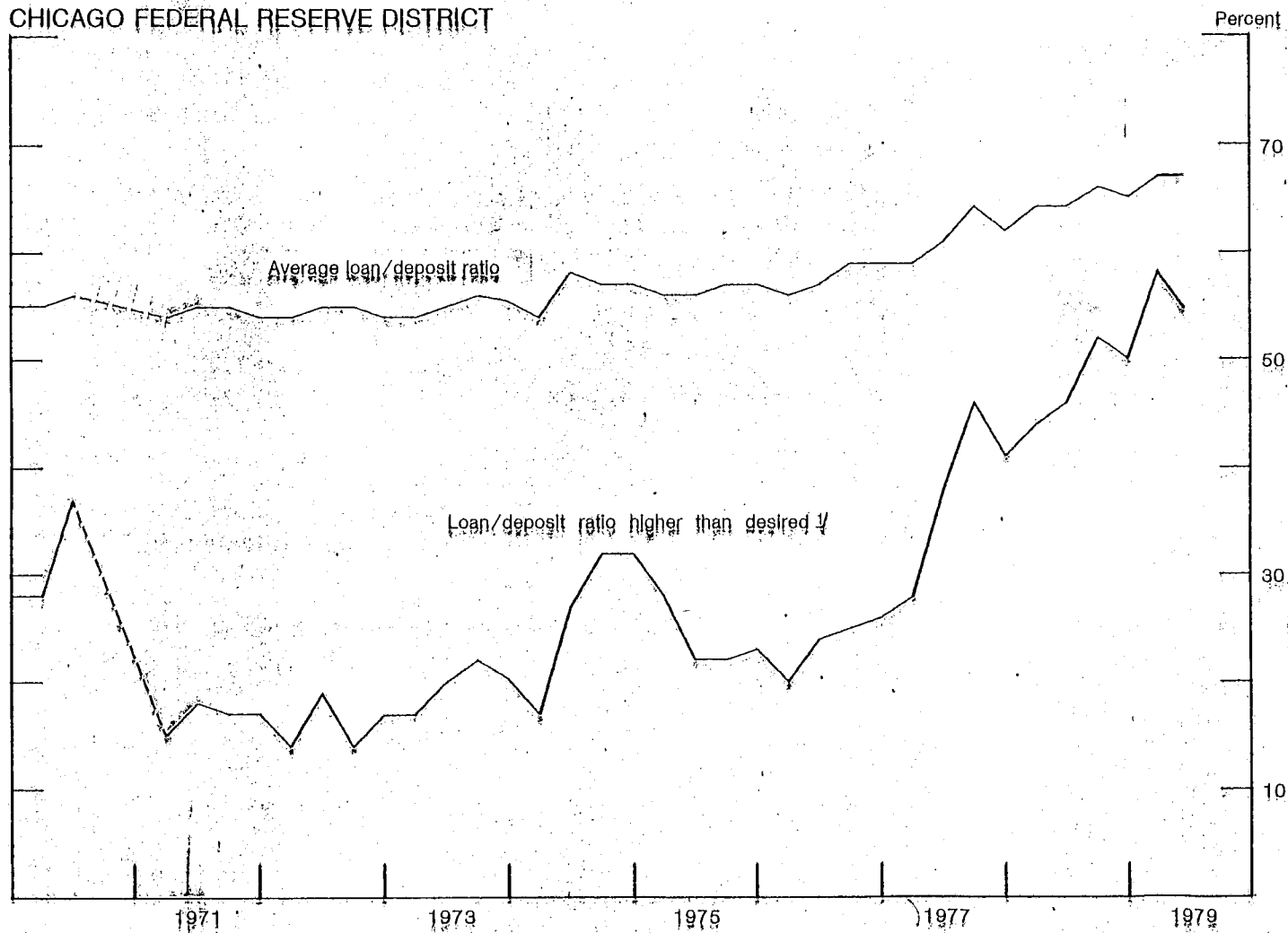
Much tighter conditions were reported by agricultural banks in the Corn Belt, as shown in Chart 5. Many agricultural banks in the Chicago District experienced an undesired surge in their loan/deposit ratios after the 1977 drop in corn prices, and more recently liquidity pressures have increased still further. The prices and incomes of corn and soybean producers have not risen as much since 1977 as those of the wheat growers in the Great Plains area, who received a much greater boost from Federal farm programs. In addition, loan demands of Corn Belt livestock producers were spurred by the higher cost of feeder cattle and by expenses associated with expansion of hog production.

As shown on the chart, the proportion of agricultural banks in the Chicago District that consider their loan/deposit ratio to be undesirably high has exceeded 50 percent since the fall of 1978. At this level, many more banks are feeling such liquidity pressure than in either 1970 or 1974. Meanwhile, the imbalance between deposit growth and loan demand continues. In the July 1979 survey, 58 percent of the banks reported that they were experiencing greater demand for farm loans than a year earlier, while only 11 percent said that the availability of funds for farm loans had increased.

Interest rate trends at agricultural banks also often differ markedly from those at large banks, and the Federal Reserve System's relatively new Survey of Terms of Bank Lending to Farmers is helping to track these variations. As Chart 6 indicates, the average farm loan rate at large banks has risen in line with increases in the national prime rate, while the average at other banks has risen less and more

Chart 5

Liquidity Conditions at Agricultural Banks



Source: Land Value and Credit Conditions Survey, Federal Reserve Bank of Chicago.
1/ Percentage of banks reporting that loan/deposit ratio is higher than desired.

slowly. Since the bottoming out of average farm loan rates two years ago, the increase at large banks up to May 1979 had totaled 474 basis points, compared with 180 basis points at other banks. The difference in behavior tended to occur at bank asset size of about \$400 million, which is also roughly the size at which banks begin to make significant use of money-market sources of funds.

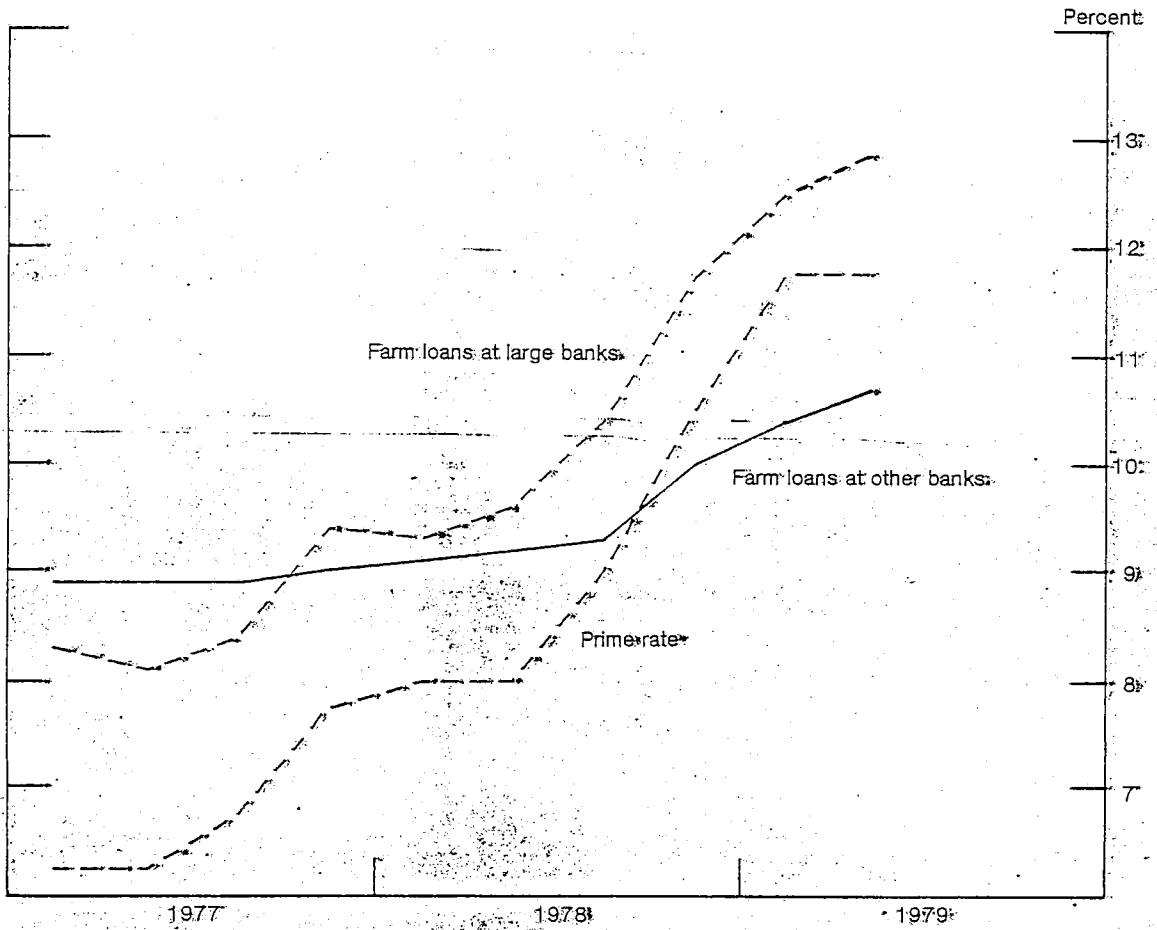
The new survey data also reveal that interest rate averages are now far less indicative of individual farm credit costs than they were a year or two ago. As shown in Table 1, the range of rates charged on individual farm loans has widened greatly. In February 1977 a range of three percentage points--from 7.0 to 9.9 percent--encompassed 95 percent of the dollar amount of all loans made. But since mid-1978 the equivalent range has doubled, with significant amounts of farm lending now occurring at rates ranging from 8 to 15 per cent. Thus, while some farm borrowers have experienced increases no greater than 200 basis points, others have faced increases as large as 600 basis points.

Table 2 indicates that the greater over-all dispersion of farm loan rates has arisen in part because the difference between rates at large and smaller banks has widened. In May 1979, 78 percent of the volume of farm loans made by large banks was at an effective rate of 12 percent or higher, while 87 percent of the loan volume at smaller banks carried rates below 12 percent--and most were made on a fixed-rate basis. However, the range of rates on loans made by the smaller banks has also increased considerably since mid-1978, and this has contributed significantly to the greater over-all dispersion.

While average farm loan rates at small banks have risen much less than at large banks, data from the Reserve Bank surveys indicate that the increase at rural banks has actually been relatively large and

Chart 8*

Interest Rates Charged by Commercial Banks First Week of Second Month of Quarter



Source: Federal Reserve Quarterly Survey of Terms of Bank Lending to Farmers.

*"Large banks" are banks in survey strata 1-3, corresponding approximately to banks which now have over \$400 million in total assets.

Table 1. Percentage distribution of farm production loans at banks, by effective interest rate¹

Effective interest rate (percent)	Feb. 1977	May 1977	Aug. 1977	Nov. 1977	Feb. 1978	May 1978	Aug. 1978	Nov. 1978	Feb. 1979	May 1979
All loans.....	100	100	100	100	100	100	100	100	100	100
Under 7.0.....	1	7	2	-	-	-	-	-	-	-
7.0 to 7.9.....	8	6	11	3	1	-	-	-	-	-
8.0 to 8.9.....	46	43	48	42	38	35	20	8	4	4
9.0 to 9.9.....	41	40	34	48	50	48	50	32	17	14
10.0 to 10.9.....	3	3	4	7	9	11	22	37	35	32
11.0 to 11.9.....	-	1	-	1	1	6	6	11	19	22
12.0 to 12.9.....	-	-	-	-	-	-	1	7	12	12
13.0 to 13.9.....	-	-	-	-	-	-	-	4	6	10
14.0 to 14.9.....	-	-	-	-	-	-	-	-	6	5
15.0 and over.....	-	-	-	-	-	-	-	-	1	1
<u>Addendum: Average effective interest rate (percent) at--</u>										
All banks.....	8.82	8.74	8.73	9.06	9.16	9.31	9.62	10.36	11.01	11.20
Large banks ²	8.34	8.08	8.40	9.13	9.32	9.61	10.37	11.73	12.53	12.82
Other banks.....	8.95	8.95	8.91	9.06	9.11	9.17	9.34	9.98	10.45	10.71

Source: Federal Reserve Quarterly Survey of Terms of Bank Lending to Farmers.

^{1/} Percentage distribution of the total dollar amount of non-real-estate farm loans of \$1,000 or more made by insured commercial banks during the week covered by the survey.

^{2/} "Large banks" are banks in survey strata 1-3, corresponding approximately to banks which now have over \$400 million in total assets.

Table 2. Percentage distribution of farm production loans at large and other banks, by effective interest rate¹

Effective interest rate (percent)	Feb. 1977	May 1977	Aug. 1977	Nov. 1977	Feb. 1978	May 1978	Aug. 1978	Nov. 1978	Feb. 1979	May 1979
<u>Large banks</u> ²										
All loans.....	100	100	100	100	100	100	100	100	100	100
Under 7.0.....	7	23	3	-	-	-	1	-	-	-
7.0 to 7.9.....	24	20	30	11	1	-	-	-	-	-
8.0 to 8.9.....	55	35	43	31	34	30	1	1	-	-
9.0 to 9.9.....	11	18	17	42	41	34	30	6	2	-
10.0 to 10.9.....	2	3	7	14	20	21	44	27	19	9
11.0 to 11.9.....	-	-	-	2	4	15	20	18	12	13
12.0 to 12.9.....	-	-	-	-	-	-	3	30	28	33
13.0 to 13.9.....	-	-	-	-	-	-	-	18	17	26
14.0 to 14.9.....	-	-	-	-	-	-	-	1	20	18
15.0 and over.....	-	-	-	-	-	-	-	-	2	2
<u>Other banks</u>										
All loans.....	100	100	100	100	100	100	100	100	100	100
Under 7.0.....	-	2	1	-	-	-	-	-	-	-
7.0 to 7.9.....	3	2	1	1	-	-	-	-	-	-
8.0 to 8.9.....	43	46	51	45	38	38	27	10	5	5
9.0 to 9.9.....	49	46	43	50	56	55	58	39	23	19
10.0 to 10.9.....	4	3	3	4	5	6	13	40	41	39
11.0 to 11.9.....	-	1	-	-	-	2	1	9	22	25
12.0 to 12.9.....	-	-	-	-	-	-	1	1	6	6
13.0 to 13.9.....	-	-	-	-	-	-	-	-	2	6
14.0 to 14.9.....	-	-	-	-	-	-	-	-	1	1
15.0 and over.....	-	-	-	-	-	-	-	-	-	-

See notes to Table 1.

rapid compared with previous periods of monetary restraint. For instance, the average "typical" rate charged on feeder cattle loans by banks surveyed in the Chicago District had by July 1979 already risen by 211 basis points since the lows of 1977, compared with total increases of 142 and 161 basis points during the 1967-70 and 1972-74 upswings, respectively. At banks in the Minneapolis survey, the average "most common" rate on short-term farm loans had risen by 179 basis points since its 1975 low, compared with a total rise of 109 basis points during the 1972-74 period.

As a factor contributing to increased cyclical variation in their farm loan rates, rural bankers have noted that the new six-month money-market certificate of deposit, which most rural banks are offering, has exposed their banks to significant cyclical change in the cost of their loanable funds. At the end of March 1979, about one year after their introduction, these certificates comprised 5.7 percent of the total resources of agricultural banks nationally (banks at which farm loans represent one-fourth or more of total loans), compared with 3.1 percent at other banks. At some agricultural banks the proportion was considerably above this average. Thus most agricultural banks probably encountered a greater degree of cyclical cost pressure on their loan rates than they had previously experienced.

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