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MINNESOTA BANKING, THE FLOW OF FUNDS, AND RURAL CREDIT

Mathew Shane

**Department of Agricultural and Applied
Economics**

University of Minnesota
Institute of Agriculture, Forestry, and Home Economics
St. Paul, MN 55108

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by

Mathew Shane

Is the unit banking system of the State of Minnesota a detriment or an asset to the State's economy, and would the inauguration of a branch banking system add to or detract from the vitality of that economy. This is the question which I address in this paper. After careful analysis of the available evidence, it is the conclusion of the author that many inadequacies exist within the present system. These include substantial movements of funds into the Twin Cities which exceeded \$2.4 billion on December 31, 1974; differentials in loan-to-deposit ratios between rural and urban banks which equalled approximately 23 percent; and lending limits on rural banks which are, on average, lower than those of the average commercial agricultural credit line. For these reasons, to be documented below, the author must conclude that the existing unit banking system is inadequate to meet the current and future credit needs of the State of Minnesota.

Commercial banking is one of the most highly regulated industries in this county. This is largely a result of the perception of the fundamental role which commercial banks play in the economic life of

the community, and of the dislocation which would be caused by a bank failure. This perception is by no means incorrect. Indeed, decisions made by banks and other financial institutions regarding the mobilization and allocation of a community's financial resources, are a central determinant of the level and growth of economic activity within that community. Very few economic units can operate in our advanced financial economy without obtaining some credit services from a commercial bank. The ability of our region to prosper in the years ahead could very well depend in part on the ability of our financial institutions to respond rapidly to the changing demands being placed on them by our ever changing and dynamic economy. Are the restraints being placed on banks by the current regulative environment preventing them from doing so?

One pronounced feature of commercial bank operations is the localized nature of its lending activity. Banks, as guardians of the communities savings, cannot risk making loans to businesses who are in activities outside their expertise or geographic area. The smaller the bank, the less able it is to operate as a diversified lending institution. The prohibition against branching implies, therefore, that the larger banking units with the capacity and expertise to loan major amounts for major projects are unable to do so except in the Twin Cities and the very few other larger metropolitan centers of our State. Unfortunately, Minnesota's current bank structure is made up of a large number of

very small banks. One of the key advantages of a branch banking system over the existing unit banking structure is that it would allow small bank offices to operate like large banks.

In this report, I will focus on three particular pieces of evidence which are central to the issue of bank structure: (1) the rural-urban balance, (2) the loan-to-deposit differential of rural and urban banks and (3) the supply and demand for rural loans with particular emphasis on rural bank loan limits and agricultural loan demand.

In the next section, a brief description of the nature of the flow of funds in the regional banking system will be presented. This will be followed by the available evidence on the current level of flow of funds in our state.

I. The Rural-Urban Flow of Funds

Chart I presents a simplified model of the rural-urban flow of funds in our region. The model focuses on the role of banks and ignores other financial institutions. As shown, banks play a role as intermediary between depositor and borrower groups. On average, more than half of a banks deposits (referred to later as the loan-to-deposit ratio) are utilized for loans, the next largest share of a banks portfolio would be used to purchase government securities. These two classes of assets make up, on average, more than 85% of a bank's portfolio.

For our purposes, we are particularly concerned with the role of banks as lending institutions, i.e., the loan-to-deposit ratio and also with their role of moving funds between the rural and urban areas of our state. In particular, three types of funds transfers are investigated:

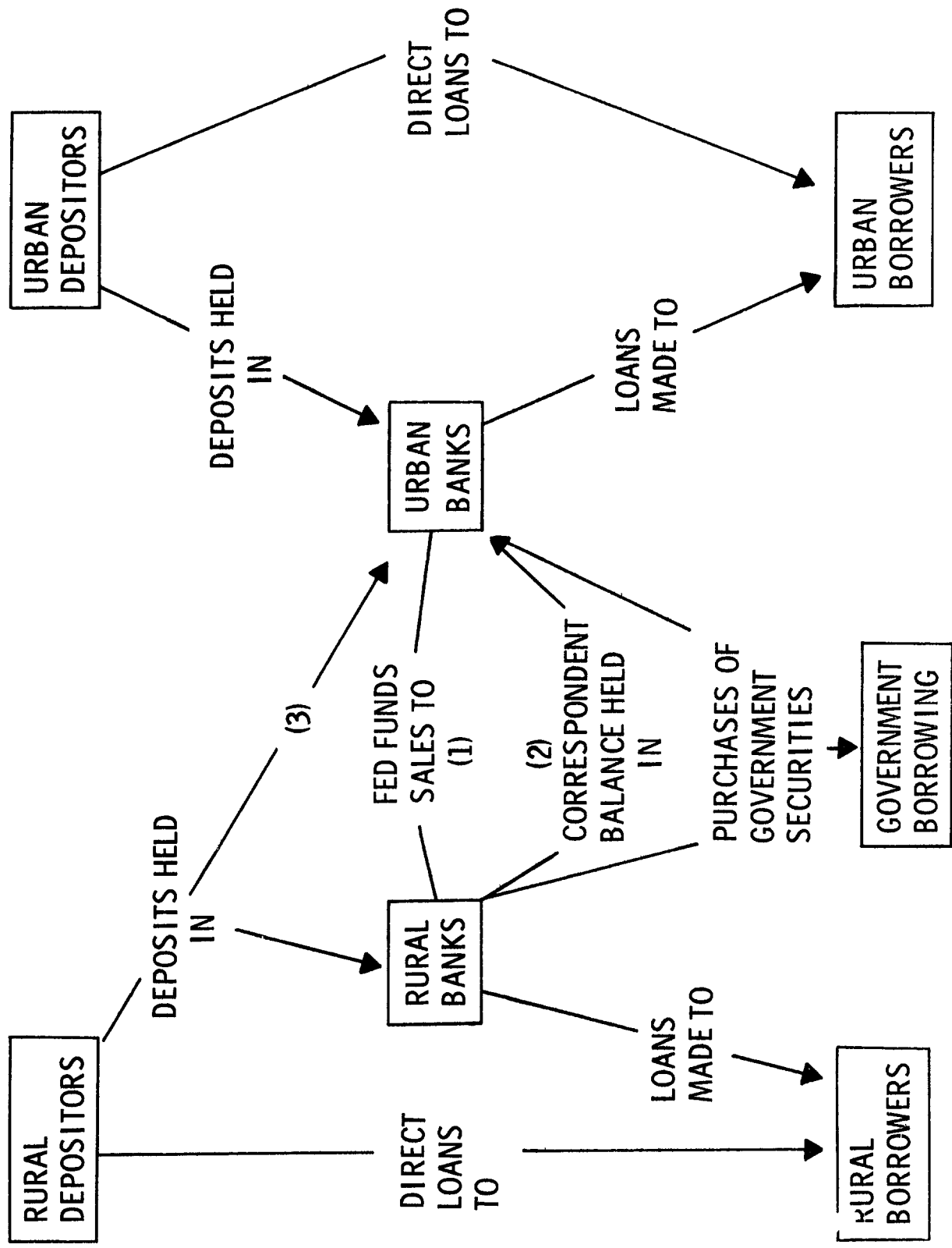


Chart 1. A Simplified Model of Rural-Urban Flow of Funds

(1) transfers through the Fed Funds Market, (2) transfers through correspondent balances and (3) direct deposit transfers. These three types of transfers are noted in Chart I.

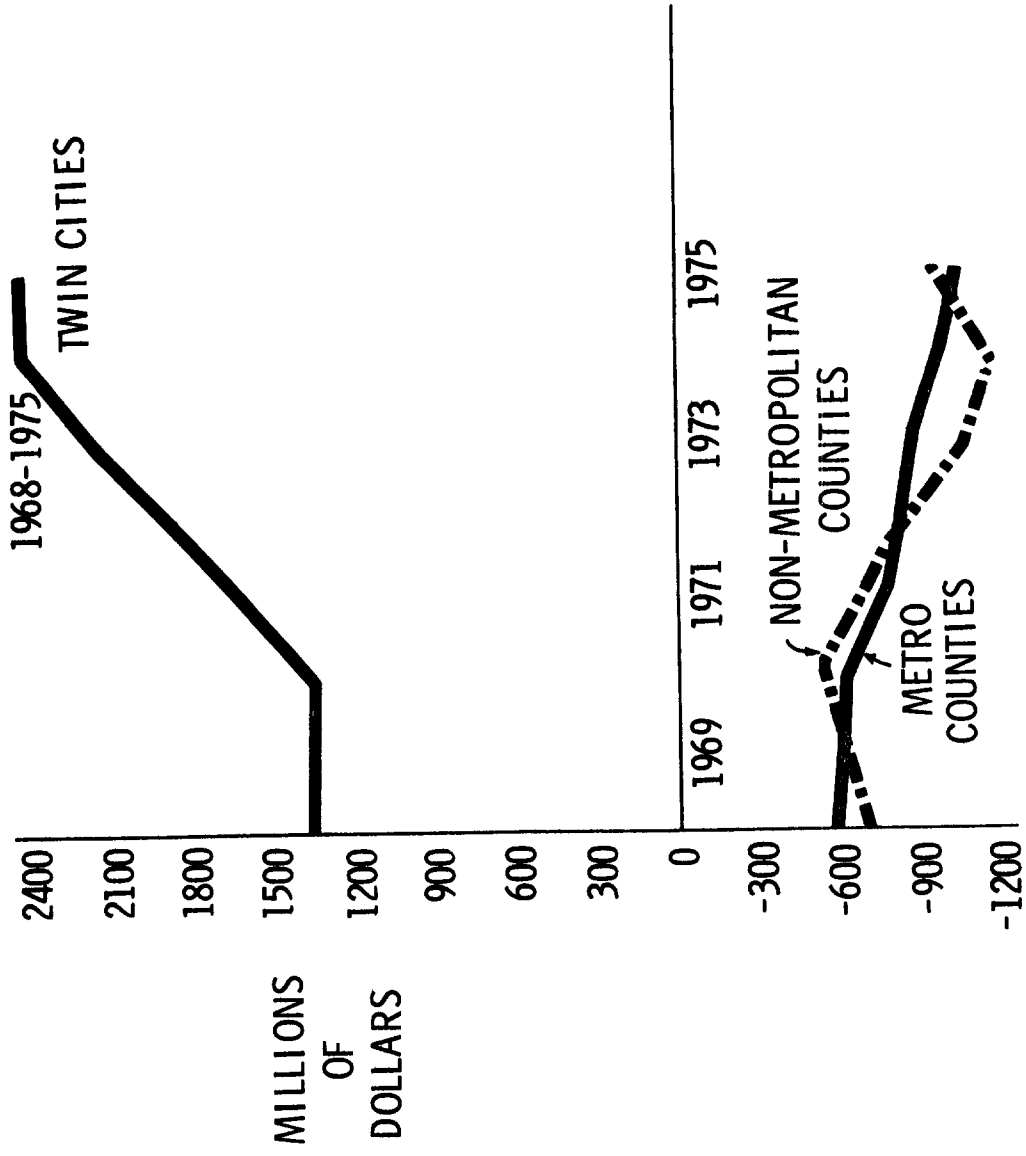
The Fed Funds Market is a relatively recently organized market for banks to transfer excess reserves on a short term basis. Correspondent balances are deposits which one bank holds in another. Usually, these are held for purposes of facilitating check clearance and other interbank services. By necessity, the very large bulk of these funds go to the very large (the eight referred to as Reserve City) banks. Direct balances are deposits held by rural individuals and companies to take advantage of service and/or interest rate differentials that might exist between their local banks and the larger urban banks. All of these play a substantial role in moving funds from the rural to the urban areas of our State.

In the following sections, I will present the available evidence relevant to these patterns.

II. The Rural-Urban Balance

One of the most prominent features of the existing banking system is the built-in tendency to move rural funds into urban areas. In Minnesota, this means primarily into the Twin Cities. Figure 1 and Table 1 presents a summary of this pattern for the period December 1967 to December 1974. Over this period, the Twin Cities banks were net importers of over \$1 billion while both the suburban (referred to as other Metro-counties) counties and the non-Metropolitan counties are net exporters. On balance at the end of period, the Twin Cities held over \$2.4 billion in non-Twin Cities funds while both the suburban and non-metropolitan counties had deficits on this account of around \$1 billion each. To

Figure 1
NET BALANCES OF TWIN CITIES, OTHER METROPOLITAN COUNTY
AND NON-METROPOLITAN COUNTY BANKS FOR MINNESOTA,



source: Table 1

Table 1: Net Balances for the Twin Cities, Other Metropolitan Counties and Non-Metropolitan Counties in Minnesota, December 31, 1967-1974.
(in millions of \$)

Year	Twin Cities	Other Metro-Counties	Non-Metropolitan Counties
1967	1,367.7	-564.7	-666.6
1969	1,366.5	-632.0	-538.5
1971	1,893.4	-859.6	-848.8
1972	2,191.3	-891.8	-968.7
1973	2,421.0	-974.6	-1,202.3
1974	2,419.1	-1,106.6	-939.5
1974-1967	1,051.4	-541.9	-272.9

Source: This table was derived by adding the net figures of Tables 2 and 3 together with the figures of Table 4. The Twin Cities consists of all banks in Hennepin and Ramsey counties; Other Metropolitan Counties consists of all banks in Anoka, Carver, Dakota, Scott and Washington counties while the Non-Metropolitan category consists of all of the remaining counties in Minnesota.

point out the significance of this, these sums respectively accounted for over 25% of the deposits held in Twin Cities banks and would represent an almost 24% increase in deposits of non-Twin Cities banks. As can be seen from Figure 1, there has been a rather pronounced increase in the deposits into the Twin Cities and likewise a trend toward increasing outflows from the non-Twin Cities counties.

Since as measured, there were three sources for this movement of funds and since the patterns underlying each was quite different over the period, let us now turn to an examination of the separate trends in the transfer of funds through the Fed Funds Market, correspondent balance mechanism and direct transfers.

A. Federal Funds Purchases and Sales

Figure 2 and Table 2 present the level of Federal Funds participation from December 31, 1965, to June 30, 1975. The most startling observation with regard to this series is the sheer growth of this market. From 1965 to 1975, the Twin Cities' purchases increased by more than 100 times and resulted in a net inflow of almost \$700 million dollars. Between 1972 and 1973 alone, the Twin Cities increased purchases by more than \$200 million. Over the same period, sales from the rest of Minnesota increased at almost as dramatic a pace, so that over the period, there was a net outflow of more than \$200 million from rural Minnesota, with \$127 million occurring between 1972 and 1973. Although there has been a period of consolidation since 1973, it is clear that this market will become increasingly important as a medium for transferring resources within the banking system of our state.

Figure 2

NET FEDERAL FUND PURCHASES OF TWIN CITIES AND NON-METROPOLITAN BANKS

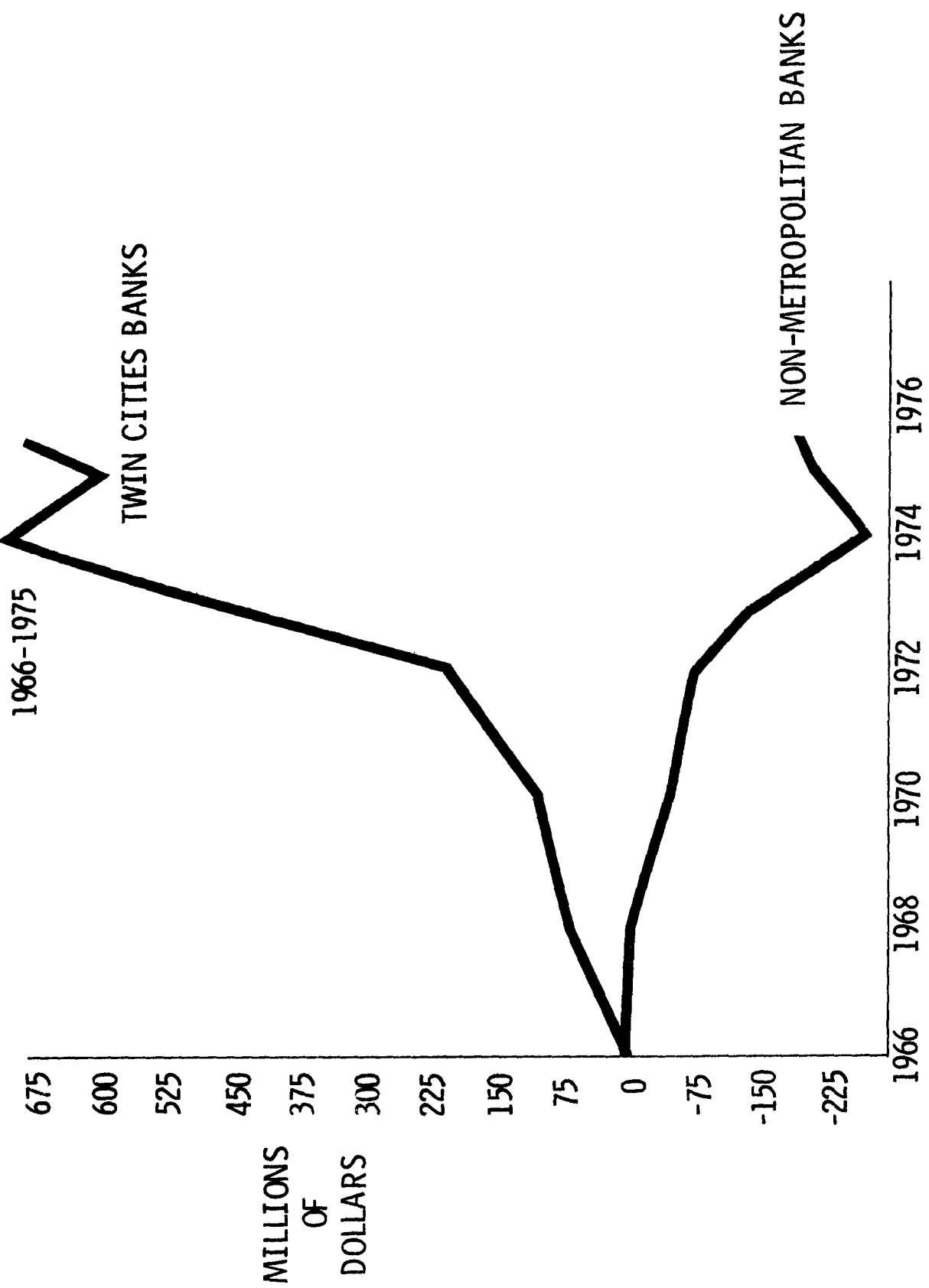


Table 2: Federal Funds Purchases and Sales of Commercial Banks in the Twin Cities, Other Metropolitan Counties and Non-Metropolitan Minnesota as of December 31, 1965-1974 (in million dollars).^{1/}

	Federal Funds Purchases			Federal Funds Sold			Net Federal Funds Purchases		
	Twin Cities (1)	Other Metro Counties (2)	Non-Metro Minnesota (3)	Twin Cities (4)	Other Metro Counties (5)	Non-Metro Minnesota (6)	Twin Cities (7)	Other Metro Counties (8)	Non-Metro Minnesota (9)
1965	10.0	0	4.1	15.5	0	.6	-5.5	0	3.5
1967	67.7	0	3.8	3.2	4.2	8.0	64.5	-4.2	-4.2
1969	267.6	.1	5.7	171.0	11.4	51.4	96.6	-11.3	-45.7
1971	430.6	2.1	17.3	230.2	12.2	94.1	200.4	-10.1	-76.9
1972	641.6	1.4	25.2	142.2	20.8	176.8	499.4	-19.5	-151.6
1973	1,110.4	6.9	23.7	410.1	29.7	299.4	700.3	-22.9	-275.6
1974	1,069.2	6.3	64.3	472.9	29.6	282.0	596.3	-23.3	-217.7
*1975	933.7	3.3	33.7	251.4	44.4	235.7	682.3	-41.1	-202.1
1975-1965	923.7	3.3	29.6	235.9	44.4	235.1	687.8	-41.1	-205.6

^{1/} The Twin Cities includes all banks in Ramsey and Hennepin Counties, the Metropolitan Area excluding the Twin Cities includes all banks in Anoka, Carver, Dakota, Scott and Washington counties while Non-Metropolitan Minnesota includes all the rest of the banks in Minnesota not included in category (1) and (2). The data was derived from county asset and liability accounts of commercial banks in Minnesota provided the author by the Federal Reserve Bank of Minneapolis. This item was not reported before 1965. Columns (7) - (9) were derived by subtracting (4) - (6) from (1) - (3) respectively.

As we shall see when we consider the differentials in loan-to-deposit ratios further in the paper, this very sharp rise in Fed Fund purchases by Twin Cities banks is very closely paralleled with the spectacular rise in loan-to-deposit ratios in reserve city banks since 1971. This will lead the author to propose that the development of the Fed Fund market is the mechanism which very large banks are utilizing to separate deposit and lending behavior, but this will come later.

B. Correspondent Balances

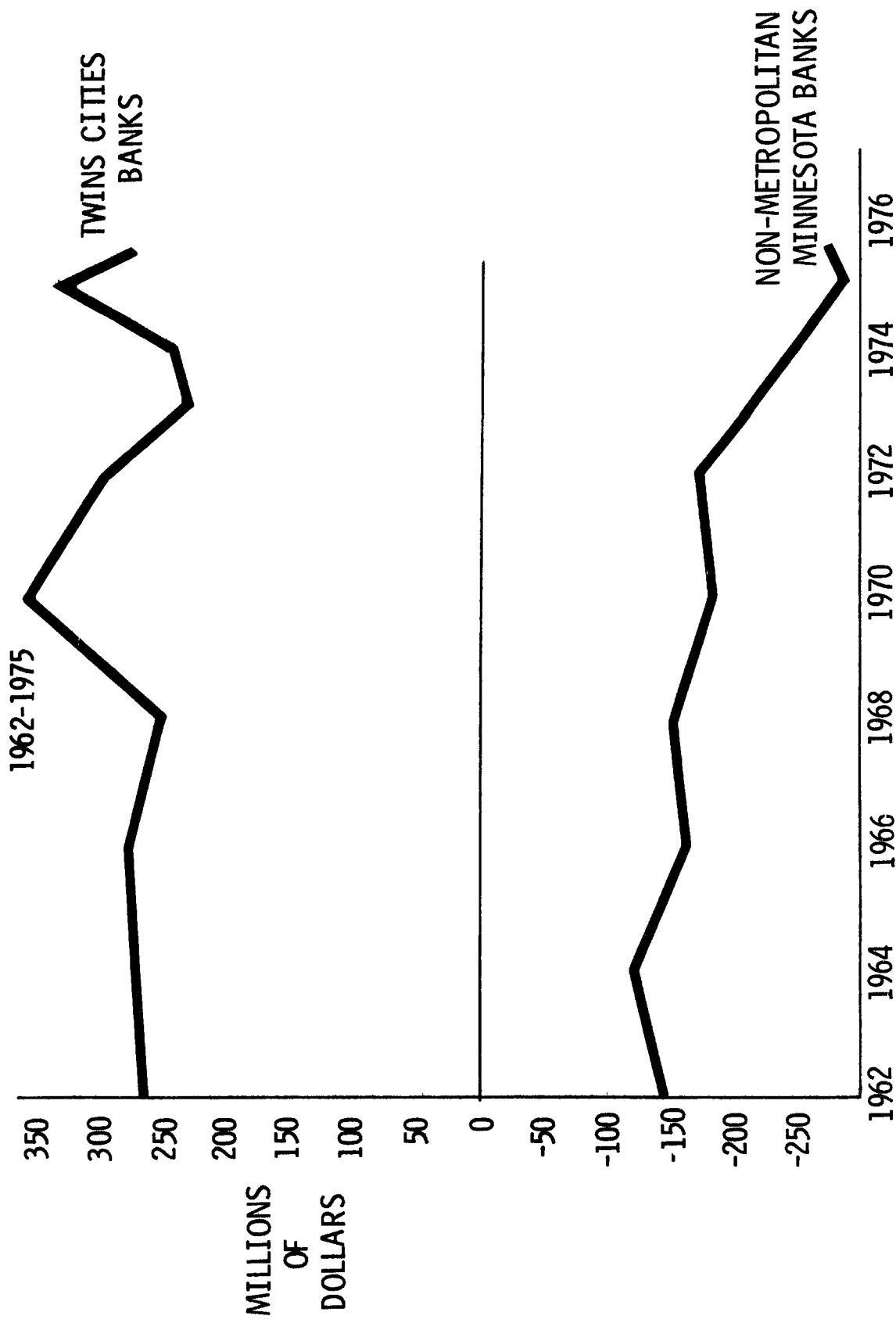
Table 3 and Figure 3 summarizes the holdings of correspondent balances^{1/} of Twin Cities and Non-Twin Cities Minnesota commercial banks from 1961 through 1975. Although there has always been a substantial correspondent balance in Twin Cities banks, no time trend is apparent from the data. On the other hand, the correspondent balances of outstate banks has continued to rise. Over the period this implied an outflow of funds in the amount of \$140 million, with most of this occurring in the later part of the period. One particularly noteworthy result is the fact that although Minnesota was a net importer of correspondent balances throughout the period 1961-1972, that as of 1973 Minnesota was a net exporter.^{2/} This situation although correcting itself somewhat in 1974 reappeared in 1975. This could imply a realigning of correspondent services with large Chicago and New York banks rather than with Twin Cities banks.

^{1/} Correspondent balances are deposits held by one bank in another in return for services received such as check clearing and overline loans.

^{2/} This can be calculated by adding the net balance of the Twin Cities and the rest of Minnesota together.

Figure 3

NET CORRESPONDENT BALANCES HELD IN TWIN CITIES AND NON-METROPOLITAN BANKS



source: Table 3

Table 3: Correspondent Balances of Commercial Banks in the Twin Cities, Other Metropolitan Counties and Non-Metropolitan Minnesota as of December 31, 1965-1974 (in million dollars).^{1/}

	Deposits From Other Banks			Deposits With Other Banks			Net Balance		
	Twin Cities (1)	Other Metro Counties (2)	Non-Metro Minnesota (3)	Twin Cities (4)	Other Metro Counties (5)	Non-Metro Minnesota (6)	Twin Cities (7)	Other Metro Counties (8)	Non-Metro Minnesota (9)
1961	370.7	8.4	33.3	102.6	17.0	177.8	268.1	-8.6	-144.4
1963	347.2	7.6	31.2	71.5	12.9	155.8	275.7	-5.4	-124.8
1965	390.3	9.3	33.1	113.2	20.4	193.7	277.1	-11.0	-160.6
1967	387.6	5.3	36.8	137.4	19.8	192.2	250.2	-14.5	-155.4
1967-61	16.9	-3.2	3.5	34.8	2.8	14.4	-17.9	-5.9	-11.0
1969	508.5	8.2	33.0	150.6	27.9	214.0	357.9	-19.7	-181.8
1971	507.5	5.5	46.1	213.4	58.0	215.4	294.0	-52.5	-169.9
1972	448.5	4.9	50.5	218.6	31.2	251.6	229.9	-26.3	-201.1
1973	464.0	4.6	46.9	222.3	34.2	291.9	241.7	-29.7	-245.0
1974	654.5	3.8	48.7	322.6	36.2	334.0	331.8	-32.3	-285.2
*1975	546.4	2.9	21.7	266.8	39.3	293.5	279.6	-36.3	-271.8
1975-67	158.8	-2.3	-15.1	129.4	19.5	101.4	29.4	-21.8	-116.5
1975-61	175.7	-5.5	-11.6	164.2	22.3	115.8	11.5	-27.7	-127.4

^{1/} The Twin Cities includes all banks in Ramsey and Hennepin Counties. The data was derived from county asset and liability accounts of commercial banks in Minnesota provided the author by the Federal Reserve Bank of Minneapolis. See Table 2

* 1975 figure is for June 1975 instead of December as in the rest of the table.

C. Net Direct Balances

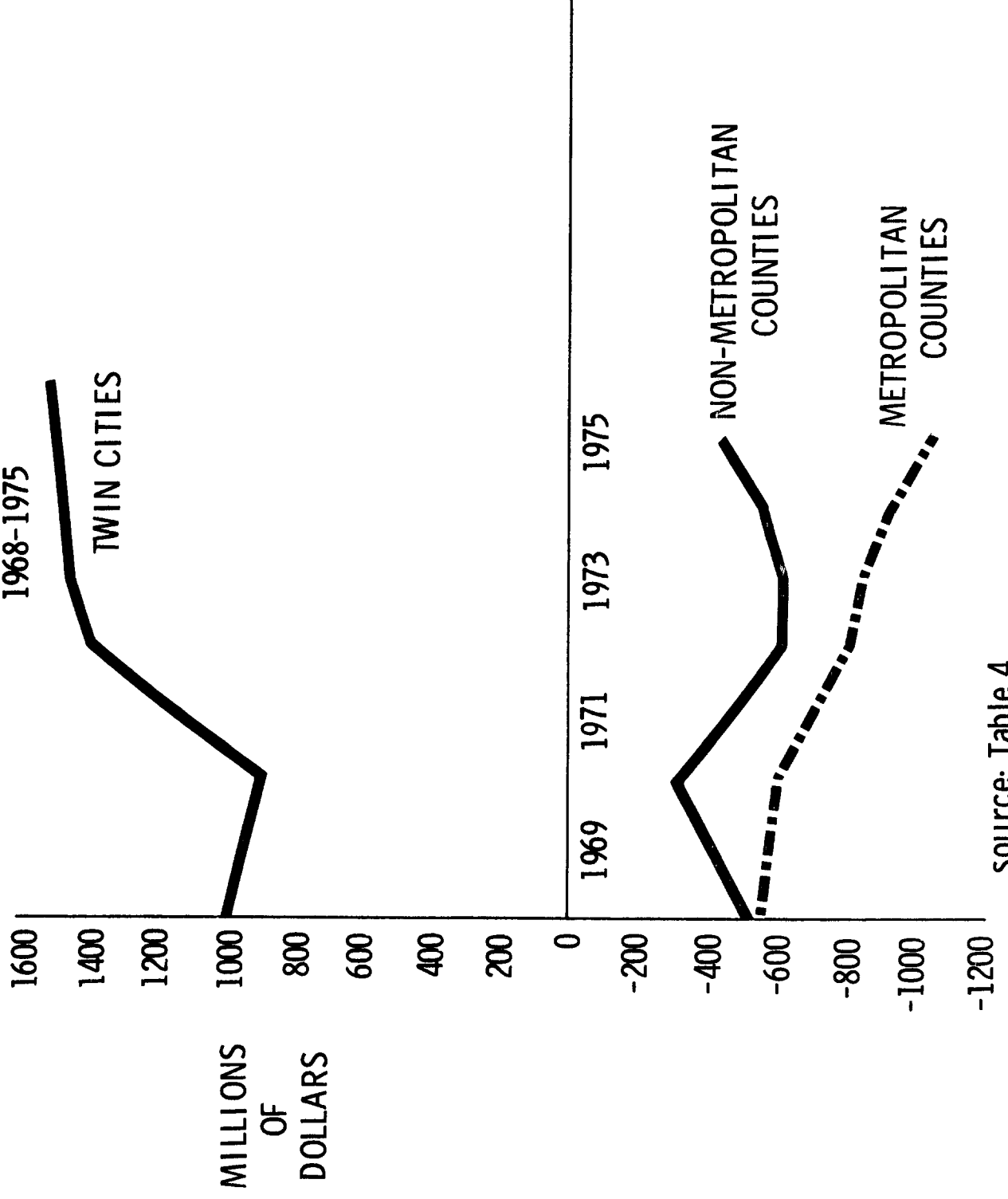
The calculation of net direct balances was accomplished using econometric techniques. Except for my own previous effort,^{3/} no other estimates of these balances is available. Figure 4 and Table 4 summarizes these estimates for the Twin Cities, other Metropolitan counties and non-metropolitan counties from December 31, 1967 - December 31, 1974.

The process of calculating these balances involved the following steps. (1) A deposit function was estimated based on a cross-section study of family financial portfolios. (2) Using the distribution of family income for each county from 1960 and 1970 census data, a predicted level of deposits was derived for each year. (3) Based on available information from the Federal Reserve and Home Loan Bank actual deposits for each county were calculated. For Hennepin county these include deposits in Farmers and Mechanics Savings Bank as well as in S & L's and commercial banks. (4) Total predicted deposits were then normalized so that the sum of actual and predicted deposits for the state were the same. (5) Finally, actual total deposits were subtracted from predicted deposits, the difference being direct balances.

Several observations on this series seem appropriate. (1) The Twin Cities experienced a large inflow of these deposits over the period particularly between 1969 and 1971. (2) No trend was evident with regard

^{3/} See Mathew Shane, "Minnesota's Bank Structure and Rural Credit," Staff Paper P75-7, Department of Agricultural and Applied Economics, University of Minnesota, April 1975.

Figure 4
NET DIRECT BALANCES FOR THE TWIN CITIES, OTHER
METROPOLITAN COUNTIES, AND NON-METROPOLITAN COUNTY BANKS
1968-1975



source: Table 4

Table 4: Net Direct Balances for the Twin Cities, Other Metropolitan Counties and Non-Metropolitan Counties, December 31, 1967-1974. (million of \$)

Year	Twin Cities	Other Metro-Counties	Non-Metropolitan Counties
1967	1,053	-546	-507
1969	912	-601	-311
1971	1,399	-797	-602
1972	1,462	-846	-616
1973	1,479	-922	-557
1974	1,491	-1,051	-450
1974-1967	438	-505	57

Source: This table was estimated by generating estimated deposits from income distributions on a county basis and comparing this with actual deposits of commercial banks less net correspondent balances and adding in saving and loan deposits and for Hennepin County deposits in F & M Savings Bank.

to the non-metropolitan counties. (3) With respect to the other metropolitan counties, there was a consistent increase in this type of deposit flow over the period. This is particularly revealing as it points to another shortcoming of a unit banking system, the lack of flexibility with regard to bank chartering. As exhibited by the data, the metropolitan counties grew faster than any other part of the state. Thus since an equivalent increase in new banks or bank offices was not forthcoming, deposits flowed into the available banks in the core countries.

II. Loan-to-Deposit Ratios

The pronounced differential between rural and urban loan-to-deposit ratios^{4/} (referred to L/D) is a universal feature of unit banking systems. For the case of Minnesota, this differential has been increasing over the period investigated. Table and Figure 5 present the loan-to-deposit ratios of Minnesota bank classified by the population of the locality in which the bank is located. For December 1960, the range of difference in L/D ratios was only slightly more than 7 percent. By December 1971, the range of difference was only approximately 10 percent. However, from 1971 through 1974, the differentials in the L/D ratios increases substantially peaking at 27 percent in 1973 and remaining at 23 percent in 1974. One further observation on the series: whereas in December 1960, there is no particular association between the average loan-to-deposit ratio of bank class except for the clearly higher ratio of

^{4/} The loan-to-deposit ratio is defined as: $L/D = (\text{Total Loans} / \text{Total Deposits}) \times 100$.

Figure 5
 LOAN-TO-DEPOSIT RATIOS OF MINNESOTA BANKS BY POPULATION OF BANK LOCATION
 1961-1975

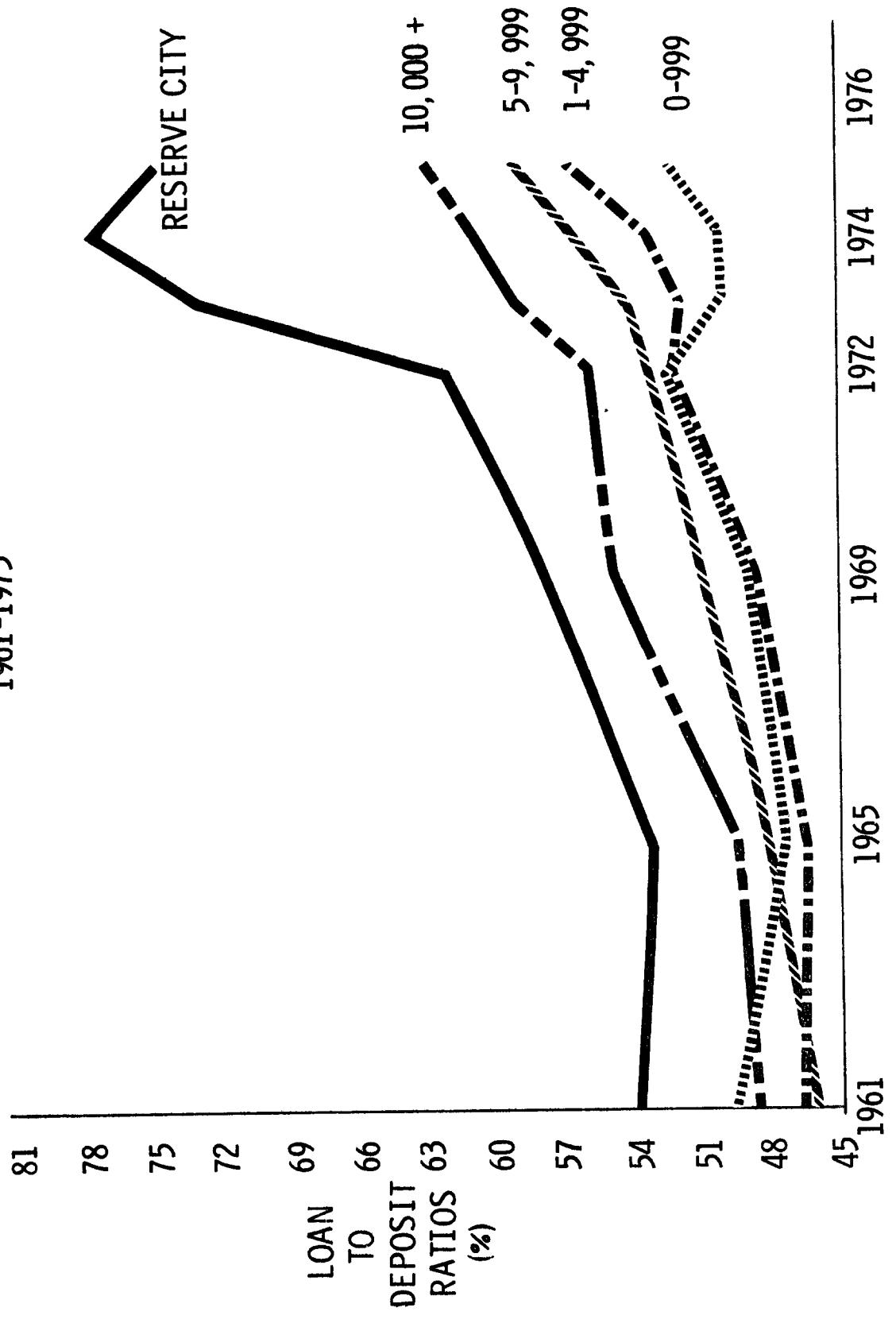


Table 5: Loan-to-Deposit Ratios of Commercial Banks in Minnesota by Size of Population of Bank Location, As of December 31, 1960-1974 (in percent)*

Date	Population Class				Reserve City
	0-999	1-4999	5-9999	10000 +	
1960	49.70	46.88	49.12	49.12	54.02
1964	47.81	46.66	48.32	50.60	53.57
1968	49.41	48.69	51.33	56.04	58.41
1971	52.67	52.50	53.32	56.89	62.36
1972	50.88	51.95	54.59	59.06	72.78
1973	50.40	53.71	56.87	61.14	77.54
1974	52.41	56.39	59.18	63.11	75.22

* Date provided the author by the Federal Reserve Bank of Minneapolis.
Derived from the Report of Conditions of all banks in Minnesota.

the Reserve City class, by the period of study, the population ranking and the L/D ratios are the same. The very sharp rise in the L/D ratio of Reserve City banks after 1971 was supported by the sharp rise in Fed Fund Purchases of Twin Cities banks.^{5/} This, of course, leads to the conclusion that Reserve City banks are now separating lending and deposit activity by the use of Fed Funds purchases.

The substantial increases in the difference in the lending behavior of the small and large banks as measured by population class points to the most serious shortcoming of the present system.

In analyzing the very substantial differences between the loan-to-deposit ratios of urban and rural banks, it could be argued that the differences are determined by the relative demand for loans rather than the supply of loans. Although this seems like a reasonable possibility on intuitive grounds, the evidence weighs very heavily on the other side. In a previous paper, ^{6/} I investigated this issue directly. The finding of that paper, was that the differences in L/D ratios between rural and urban areas depends more on the structure of rural banking than inadequate demand. Indeed, the comparison of

^{5/} It should be pointed out that the Reserve City class consists of the 8 largest banks in the Twin Cities.

^{6/} Mathew Shane, "Financial Restraint, Banking and Rural Development", Staff Paper P74-1, Department of Agricultural and Applied Economics, University of Minnesota, January, 1974.

L/D ratios of South Dakota branch offices with Minnesota rural banks indicates that a substantial increase in L/D ratio is possible (see section V).

The key factor in explaining the low rural L/D ratios is the small average size of rural, the very real lack of competition in the rural loan markets, and the risks associated with a lack of diversity in rural economic activity.

Minnesota's unit banking system is dominated in numerical terms by a very large number of very small banks. For various reasons, to be discussed below, these small banks appear less and less able to provide the kind of banking service which our dynamic economy requires. The effects of this is that there are substantial areas in Minnesota where there is little or no banking or other financial competition and where only the financial needs of the very smallest business can be met.

As of December 1974, 28 of the 87 counties had five or fewer banks. At the same time 21 counties did not even have one savings and loan association office.^{7/}

In addition to the fact that many rural Minnesota banks are quite isolated, there are other features of the state's bank structure which

^{7/} Note that the Savings and Loan Associations are not restricted by the state's branch banking constraint. Therefore they have been branching into new areas at a very substantial pace. In 1967 the earliest available data indicates that 39 counties did not have even one S. & L. office. By 1972, this number had dropped to 36 counties, while it now stands at 21 counties.

tends to foster conservative banking among most of Minnesota's non-metropolitan banks. These include (1) deposit fluctuations, (2) portfolio diversification problems, (3) lack of specialized loan officers and (4) low loan limits.

Each of these problems is in some way related to the small average size of non-metropolitan banks. Table 6 presents a distribution of commercial banks by size of deposits. Of the 742 commercial banks in Minnesota, 470 had deposits of less than \$10 million, while 577 had deposits of less than \$15 million. Table 7, which gives the distribution over size of towns, demonstrates the close association between small banks and small towns. The median bank in Minnesota has almost \$6 million in deposits and an individual loan limit of approximately \$60 thousand. Although this topic will be analyzed in the next section, this fact portends serious problems for the average bank trying to meet the average loan need of a rural business.

Because of the heavy dependence of outstate banks on agricultural loans -- the 526 banks in towns having less than 5000 population had on average 41 percent of their loans in agriculture -- there is both a serious seasonality to deposits and an extremely high risk associated with a business failure. This is due to the fact that the income and wellbeing of the farm population in a given locality would naturally tend to fluctuate together. If one adds to this the fact that the small resource base of the median bank is inadequate to hire specialized agricultural loan officers, one realizes that the low loan-to-deposit ratios are indeed justified within the current system.

Table 6. The Distribution of Minnesota Commercial Banks by Size of Deposits as of December 31, 1974

Size of Deposits	Number of Banks
Less than 5 million	240
5-9 million	230
10-14 million	108
15-20 million	51
More than 20 million	<u>113</u>
Total	742

Table 7. The Distribution of Minnesota Commercial Banks by Population of Bank Location and Reserve City Classification for December 31, 1974

Population Class	Number of Banks	Average Deposits Per Bank (\$1000)
Less than 1000	309	4,926
1000-4999	217	10,916
5000-9999	63	19,864
Greater than 10,000	145	28,771
Reserve City	<u>8</u>	<u>571,598</u>
Total Minnesota	742	18,716
Total Less Reserve City	734	12,689
Median Bank	371	5,956

Figure 6. Average Legal Lending Limits and Average Agricultural Line of Credit of Credit of Minnesota Banks, 1971 - 1975 (\$1000)

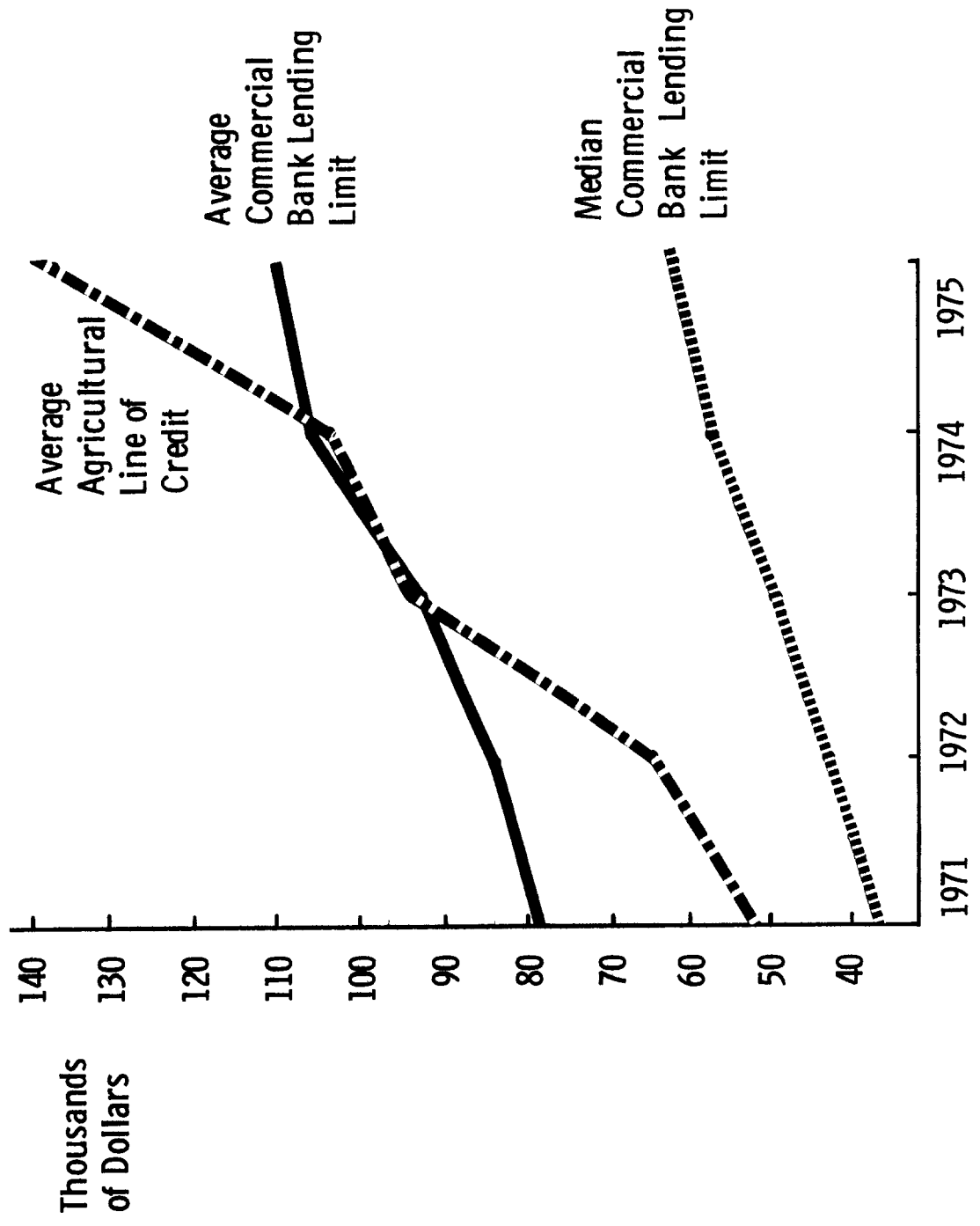


Table 8

AVERAGE YEARLY MAXIMUM FARM LOAN OF FIVE MINNESOTA BANKS, 1970 - 1975, IN DOLLARS^{1/}

	1970	1971	1972	1973	1974	Projected 1975
Term Loan (Machinery-Equipment)	18,818	22,761	29,436	33,260	44,153	43,859
Operating Loan	31,753	39,824	62,222	67,517	90,835	76,388
Total Loan	50,571	62,585	91,658	100,777	134,988	120,147
Interest Rate Charged	7.9	8.0	7.95	7.89	8.86	8.98
Real Estate Loan ^{2/} (only if used to purchase land)	8,806	6,956	14,562	15,328	16,504	16,368

^{1/} The five banks were located in Moorhead, Rochester, Albert Lea, Marshall and Dawson. Five agricultural customers from each bank were chosen at random from all agricultural customers who were with the bank since 1970.

^{2/} Only the bank at Marshall made any loans for agricultural real estate.

Table 9. Average Capital and Surplus, and Lending Limit^{1/} of Non-Twin City Banks, 1970-1974 in Thousands of Dollars.

	1970	1971	1972	1973	1974
Capital and Surplus	378.642	404.074	454.237	517.462	538.682
Lending Limit	75.728	81.414	90.847	103.492	107.736

^{1/} The average is derived by taking the total value and dividing by the number of Minnesota banks outside of Ramsey and Hennepin counties. Note that by taking the strict average that the mean value is considerably higher than the median value which represent the point at which half the banks have higher deposits and half lower.

III. Supply and Demand for Rural Loans

The last issue to be discussed involves the capacity of the existing unit banking system to respond to the changing composition and types of credit demand. As stated previously, the average bank in Minnesota has a legal lending limit of about \$60 thousand.

Table 8 summarizes the average credit line of 25 Minnesota farmers at five Minnesota banks. On average the agricultural credit lines increased 270 percent over the five year period from 1970 through 1974. From 1969 through 1973, a comparable five year period, the average loan limit of a non-Twin Cities bank increased only 137 percent (see Table 9). Since in general banks are reluctant to loan out funds up to their limit and as a mean is upwardly biased anyway, this difference in growth implies a serious credit problem. Put another way, the average bank in 1974 (referring to the median as previously used) could not provide the average amount of credit required by the average commercial farm borrower. Since the trend in agriculture is toward fewer and larger farms with higher average credit demands, we see a situation developing where a relatively large borrower is facing a relatively small lender. There are various ways in which a bank can exceed its loan limit. However, for all practical purposes a loan which exceeds the lending limit is a rare exception. The implications are quite clear in terms of the ability of commercial banks to finance agricultural operations. Although information on average business lines of credit is not provided, very few businesses can survive on only sixty thousand dollar lines of credit. Indeed, most businesses with sales of more than \$500,000 would require credit lines for inventory and production credit of more than \$50,000 alone.

IV. Branch Banking in South Dakota

Is there evidence that an alternative regional branching system such as the one proposed in Minnesota (S.F. 639, 1976 State Legislature) would in any way reduce these problems and allow better loan performance? The answer to this question is definitely yes. Table 10 summarizes the evidence related to the operations of three Northwest Bancorporation affiliated branch systems in South Dakota, the First National Bank of Aberdeen, First National Bank of Rapid City and Northwestern Bank of Sioux Falls. On average the branch systems had almost as high L/D ratio as did the Reserve City class of banks in Minnesota, 71% as compared with 75%. In addition, branch offices in towns of less than 5000 population had loan-to-deposit ratios fully 9 percent higher than the comparable class of banks in Minnesota, 61% as compared with 52%. Since one would expect, if anything, that banks in South Dakota would have lower L/D ratios than Minnesota banks, this result is particularly interesting. ^{8/}

Thus it must be concluded that many of the problems associated with low loan-to-deposit ratios of rural Minnesota banks could be overcome in a regional branch banking system such as exists in South Dakota. Increasing the loan-to-deposit ratios of banks in towns of less than 5000 by nine percent would imply an increase in loans totalling approximately \$200 million! This much in additional funds would accrue automatically to the small communities of Minnesota, even without considering the effect on the rest of the banking system.

^{8/} For evidence on this, see my paper, "Flow of Funds Through the Commercial Banking System," Agricultural Station Bulletin 506, University of Minnesota, August 1972.

Table 10. Loan-to-Deposit Ratios, Farm Lending, Population of Office Location and Lending Limit of Three Branch Systems in South Dakota as of December 31, 1974.

Office	Loan-to Deposit	Farm Loans Total Loans	Size of Community	Legal Lending Limit (\$)
Aberdeen Bank				
Aberdeen	90.4	23.7	26,476	937,500
East	176.9	22.3	26,476	937,500
Bristol ^{1/}	33.0	63.7	470	937,500
Britton	58.6	60.1	1,465	937,500
Groton	83.0	44.7	1,071	937,500
Hecla	83.3	75.0	407	937,500
Milbank	66.5	24.4	4,100	937,500
Mobridge	73.2	31.1	4,545	937,500
Redfield	58.3	50.1	2,943	937,500
System Average	80.36	41.27	7,550	937,500
Sioux Falls Bank				
Colonial	108.22	-	72,488	1,700,000
Stockyards	76.50	22	72,488	1,700,000
Westwood	76.39	-	72,488	1,700,000
Brookings	68.45	15	13,717	1,700,000
Chamberlain ^{2/}	37.72	51	2,626	1,700,000
Dell Rapids	73.07	54	1,991	1,700,000
Gregory	54.51	70	1,756	1,700,000
Huron	68.15	27	14,299	1,700,000
Lake Preston	63.64	75	812	1,700,000
Madison	51.22	26	6,313	1,700,000
Parker	46.39	56	1,005	1,700,000
System Average	60.36	33	21,665	1,700,000
Rapid City Bank				
Main	83.4	N.A.	43,836	1,600,000
Robbinsdale	122.0	N.A.	N.A.	1,600,000
Villa Ranchaero	79.0	N.A.	N.A.	1,600,000
Belle Fourche	79.8	N.A.	4,236	1,600,000
Deadwood	44.4	N.A.	2,409	1,600,000
Hot Springs	53.0	N.A.	4,434	1,600,000
Lead	47.0	N.A.	5,420	1,600,000
Newell	67.6	N.A.	644	1,600,000
Spearfish	52.1	N.A.	4,661	1,600,000
Sturgis	76.1	N.A.	4,536	1,600,000
Mountain View	110.0	N.A.	N.A.	1,600,000
System Average	74.04			

^{1/} Bristol bank was acquired in late 1974.

^{2/} The Chamberlain office was heavily involved in cattle loses and writeoffs.

^{3/} The Parker office was acquired during 1974.

V. Conclusions

Minnesota's current unit banking system faces some very serious problems in meeting the lending needs of Minnesota. The evidence indicates that substantial quantities of funds are moving from rural and suburban areas into the Twin Cities, that rural banks are far less aggressive in their lending behavior than their city cousins and that especially in agriculture, the average Minnesota bank will find it increasingly difficult to provide for the credit needs of the average farmer. What is even more serious is that these problems appear to be getting more severe rather than less, and that the current system will therefore become more and more inadequate to the demands of the future.

In each of these crucial areas there is evidence that a regional branch banking system would help to overcome these growing problems. It would remove the constraint of low loan limits by pooling the resources of many banks. It would remove some of the risk faced by a single bank in a concentrated loan portfolio by increasing the geographic area and complexion of loans. It would permit the hiring of specialized lending and borrowing agents which becomes increasingly important in our complex technological society. And finally, it would utilize the best people in the banking industry over many more banking offices and over a larger resource base thus giving more people access to good banking.