THE LENDING POLICIES OF BANKS IN NONMETROPOLITAN AREAS AND THE IMPLICATIONS FOR LOCAL ECONOMIC DEVELOPMENT

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INTRODUCTION

The process of local economic development is extremely complex, and the factors which contribute to its success or failure are many. A capital shortage, however, is generally regarded as one of the problems which must be overcome for nonmetropolitan area development. A very recent acknowledgement of the need for additional local capital resources is implicit in the Talmadge-Humphrey Rural Development Act of 1972. The heart of this proposed legislation is the creation of ten borrower-owned regional banks that over the course of the next decade would provide $40 billion in loan capital to rural areas.

The capital needed for local economic development has many components, i.e., venture capital, long-term loans, short-term bank credit, etc. Access to each of these types of credit is generally regarded as a necessary although not a sufficient condition for economic development. Richard Tilly demonstrated this in this study of the industrialization of the Rhineland. He showed how a failure of the central bank to provide the necessary funds for industrialization was compensated for by non-bank financial intermediation, and he further showed how the failure of Southern German industrial development could not be explained solely by financial factors.[1]

It is the argument of this paper that while financial factors are not, in and of themselves, a sufficient condition for economic development, they can be a positive force, especially at the margin. We further argue that governmental policy should encourage larger average size banks and that this would aid industrial development by increasing availability of credit as well as benefit depositors by providing increased safety.

The literature comparing the portfolio behavior of small and large banks is extensive. One approach has dealt with attempts to explain bank lending behavior in terms of maximizing profit for some given level of risk. This is the now familiar solution to the portfolio selection problem which was developed by Markowitz.[2] Studies by Stanley Besen and Richard Porter, among others, have extended this type of analysis. For example, Besen, building on earlier work by Porter, found that the larger the member commercial bank (member of the Federal Reserve System), the larger the ratio of loans to deposits.[3]

In this paper we shall focus on the issue of bank structure and regulation, not directly from the point of view of portfolio management, but from the point of view of local economic development. We hypothesize that the ratio of both nonmember and member bank loans and discounts to the sum of loans and discounts, U.S. government bonds, other securities and other assets (excluding cash and due from banks) is positively related to bank size. Our hypothesis differs from earlier formulations of bank lending behavior in that we do not use the traditional loan-deposit ratio, but use instead what we

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feel to be a less biased measure of asset preference, and we treat member and nonmember banks as distinct sets in terms of their lending behavior.

Our reasons for using this measure as opposed to the traditional loan-deposit ratio will be enumerated in some detail directly below. Our examination of member and nonmember banks as distinct sets stems from our belief that regulation of member banks by the Federal Reserve System is closer than is comparable state regulation of nonmember banks. To the extent that this is true, we might expect a difference in portfolio management between the two sets.

THE DATA

In order to examine the effect of bank size on portfolio management, balance-sheet data for all the banks in Georgia for 1970 were collected.[4] These data were tabulated in terms of asset composition by bank size categories and by member or nonmember status in the Federal Reserve System.

As stated earlier, the most frequently used measure of loan activity is the loan-deposit ratio. We concluded there were certain real deficiencies in the use of this measure as it relates to the problem of portfolio management. Instead, we focused upon the assets most under discretionary control by bankers and that best reveal what is usually called "asset preference." The assets meeting this criterion were: (1) loans and discounts, (2) U.S. government securities, (3) other securities (mainly state and municipal bonds), and (4) other assets (primarily buildings, furniture, and fixtures). There is, admittedly, some arbitrariness in this classification. For example, all banks need "secondary reserves" of U.S. government bonds to assure liquidity and definitely require a facility from which to operate. Nevertheless, there still remains considerable latitude for preferences to emerge among these asset categories.

Deleted from consideration was the asset "cash and due from banks." This was done because:

1. One component of this aggregate is the reserve requirement (this differs from bank to bank depending primarily upon membership status, deposit composition, and deposit size of bank), which is in a strict sense an involuntary asset holding.[5]

2. The other component of this aggregate stems from cash items in the process of collection. All banks have checks to clear daily as a natural consequence of performing their services. Nonmember banks typically process most of their checks through a member bank where they maintain a correspondent relationship. Thus, this institutional arrangement gives rise to relatively permanent demand deposits at the correspondent bank. These demand deposits act to defray the costs incurred by the correspondent bank processing these checks. Since nonmember banks may also meet their required reserve ratio by deposits in "authorized banks," these deposits also meet this need. A consequence of this is that it becomes virtually impossible to disaggregate these deposits according to their purposes.

Uncollected funds are not subject to the reserve requirement of the Federal Reserve System. Thus, larger member banks have a positive incentive for actively seeking correspondent clearing relations with small nonmember banks. These deposits are generally regarded as profitable for the larger banks, and, additionally, the increased clearing volume often makes the employment of electronic data-processing equipment more economical in terms of lower check-handling unit costs. Therefore, the balance sheets of banks:

(1) over-state "true" deposit liabilites, (2) give a misleading measure of bank size, and (3) make conventional loan-deposit ratios a biased measure of loan preference in bank portfolios.

From the preceding description of the clearing mechanism it should be apparent that total bank demand deposits are swelled by the institutional arrangements existing between correspondent banks. Deletion of cash and due from banks in our formulation reduces this distortion.

Our primary interest from a policy standpoint was in the proportion that loans and discounts were of all discretionary asset holdings. Table 1 presents the loan and discount ratios as a percentage of discretionary assets for nonmember and member banks. It is readily apparent that for nonmember banks the percentage of loans and discounts of total discretionary assets increases as the size of the bank increases from under $5 million in assets to the class of $25-to-$50 million in assets. It will be noted that the relationship between size and the loan-discount ratio as a percentage of discretionary assets is much less consistent for member banks.

In Table 2 we find that the percentage of discretionary assets in U.S. government securities for nonmember banks is a decreasing series up into the size category of $20-to-$25 million in assets. This would indicate that small, nonmember banks have a much higher percentage of their discretionary assets in government securities and a correspondingly lower percentage of their assets in loans and discounts. Indeed, when we posited the null hypothesis that the number of banks in each loan/asset percentage category is independent of deposit size, we were able to reject this for nonmember banks using a x^2 test at the .01 level of significance. We also found that we could reject a similar null hypothesis for member banks at .05 level of significance.

POLICY IMPLICATIONS

The expansion of lending activity by nonmember and member banks would have the tendency to raise the overall level of local spending and, despite the fact that large leakages exist for subregional areas, would increase the economic activity in these markets. This result stems from the existence of a small but positive money multiplier which tends to parallel the more frequently discussed local economic-base multiplier. Indeed, the success of the economic-base multiplier is probably inexorably intertwined with that of the money multiplier and only reaches its full potential in a favorable financial environment.

Although the precise relationship between the level of loan activity and the level of economic activity has not been explicitly established, we can reasonably assume that it will be positive, especially when an underemployment equilibrium exists. This would lead us to argue that state bank regulatory authorities should seriously examine strategies for increasing the average size of nonmember banks. One strategy which might be followed without reducing geographic coverage is to allow more liberalized branch banking.

The proposal for more liberalized branch banking is a controversial one and has many arguments both pro and con. Support comes from such quarters as the New York State Banking Department, which found that "expansion of major branch banking systems, either by de novo branching or by merger would improve the banking system's performance as measured by most ... indicators."[6] Further, it has been argued by Richard F. Wacht that the public benefits from branch banking because of increased deposit safety and the

availability of credit.[7] Louis H. Lauch and Neil B. Murphy pursued these findings and concluded that "branching does tend to reduce (deposit) variability within a metropolitan area."[8]

On the opposing side, one of the key arguments is that liberal branch banking laws facilitate the movement of money from nonmetropolitan regions into financial centers. While this may be true, it is also the case, as seen from our data presented above, that under the present system the ratio of loans and discounts for small nonmember banks is quite low and their percentage holding of governmental securities is quite high when compared to larger banks. We are already seeing funds that might be used for local loans and discounts leaving the nonmetropolitan areas. If the portfolio preferences of these banks are governed by a mean, variance criterion or some other stated objective, then we would expect worthy projects in nonmetropolitan areas to receive their share of loans and discounts from integrated banks.

One of the tendencies which may lead to low loan and discount ratios for nonmetropolitan banks was noted by Clifford H. Kreps, Jr.: "Many bankers are more addicted to liquidity than they need to be, have less preference for loans over investment assets than they should and prefer some types of borrowing customers to others for reasons difficult to rationalize in terms even of long-term 'going concern' concepts of profitability."[9] If, as Kreps has observed, small nonmember banks are overly committed to liquidity, this means that legitimate business loans in their areas are being unfulfilled by the local banking institutions. We find, for example, that many small banks do not consider mobile home loans or even FHA mortgages. The reasons for not making these types of loans may be that they require a special expertise in the first instance and a knowledge of federal bureaucratic procedures in the second. Both of these factors may act as barriers to increased loan activity, especially to nonmetropolitan bankers who are overly committed to liquidity.

Raising the average size of banks by liberalized branching regulations would act to reduce their cash flow variability and thus permit greater loan and discount holdings. The latter would be consistent with profit maximization for some given degree of acceptable risk.

If the low loan-asset ratios of small banks reflect a lack of legitimate local loan opportunities, then liberalized branching regulations would probably see some unused additional lending power flowing into metropolitan areas. We would still argue, even in this case, that larger banking organizations with increased division and specialization of labor might provide better community service than many small independent state banks.

SUMMARY

The purpose of this paper is to examine the lending policies of nonmetropolitan area banks and to evaluate the performance of these banks in terms of support for economic development. We rejected the traditional loan-deposit ratio as a measure of bank policy and in its place used a more direct measure of asset preference, which we feel gives a better indication of portfolio policies. Data for all banks in the State of Georgia were analyzed for 1970. We found, using our measure, that the percentage of discretionary assets consisting of loans and discounts increased as bank size increased for both nonmember and member banks. This leads us to conclude that local development efforts may be strengthened by following policies which encourage larger sized banking units.

Table I. Loan And Discounts As A Percentage Of Discretionary Assets

Bank Size Category in Millions[a]	Nonmember Banks				Member Banks			
	No. of Banks	Percent	Std. Dev.	V[c]	No of. Banks	Percent	Std. Dev.	V
Under 5	189	57.1	15.5%	.27	13	53.9	19.1%	.36
5 to 10	106	60.6	11.6%	.19	11	66.2	9.0%	.14
10 to 15	35	62.1	9.1%	.15	15	59.1	10.1%	.17
15 to 20	17	64.8	9.1%	.14	10	67.7	8.1%	.12
20 to 25	6	66.7	6.8%	.10	2	64.8	1.7%	.03
25 to 50	10	69.9	7.3%	.10	12	65.3	10.0%	.15
50 to 100	2	69.2	4.4%	.06	4	72.7	2.2%	.03
100 to 250	0	-	-	-	2	60.6	4.0%	.07
250 and over	0	-	-	-	5	70.3[e]	6.6%	.09
	365	62.7%[b]			74	71.1%[d]		

[a] The sum of loans and discounts, U.S. government securities, other securities, and other assets.
[b] All nonmember banks with branches, 65.5%.
[c] $V = |\sigma/\varepsilon\ (x)|$ or the coefficient of variation
[d] All member banks with branches 71.5%.
[e] This percentage understates the extent of lending by large banks because we were unable to accurately determine the de facto lending through subsidiaries.

Table 2. U.S. Government Securities As A Percentage Of Discretionary Assets

Size of Bank in Millions	Nonmember Banks		Member Banks	
	U.S. Government Securities	Standard Deviation	U.S. Government Securities	Standard Deviation
Under 5	21.4	13.1	15.8	10.1
5 to 10	16.6	8.5	12.1	3.1
10 to 15	15.4	7.9	15.2	7.4
15 to 20	13.8	7.1	12.5	5.2
20 to 25	12.0	4.8	9.6	3.1
25 to 50	12.0	6.3	10.1	3.8
50 to 100	12.8	0.6	13.9	6.0
100 to 250	6.7	-	9.5	0.5
250 and over	-	-	6.0	2.5
	15.7%		6.7%	

FOOTNOTES

[1]Richard Tilly, Financial Institutions and Industrialization in the German Rhineland, 1815-1870 (Madison: The University of Wisconsin Press, 1966).

[2]Harry M. Markowitz, Portfolio Selection (New York: John Wiley & Sons, Inc., 1959).

[3]Stanley M. Besen, "An Empirical Analysis of Commercial Bank Lending Behavior," Yale Economic Essays, V (Fall 1961), 283-315. Also see Richard C. Porter, "A Model of Bank Portfolio Selection," Yale Economic Essays, I (Spring 1961), 323-359.

[4]Balance sheet data came from International Bankers Directory, Final 1970 Edition (Chicago: Rand McNalley & Company, 1970).

[5]Excess reserves, or idle cash balances, are also included in this component. While it would be highly desirable to isolate this and include it as part of the "asset preference" category, it simply was not feasible.

[6]New York State Banking Department, Branch Banking: Bank Mergers and the Public Interest (January 1964).

[7]Richard F. Wacht, "Branch Banking and Risk," Journal of Finance and Quantitative Analysis, III (March 1968), 97-107.

[8]Louis H. Lauch and Neil B. Murphy, "A Test of the Impact of Branching on Deposit Variability," Journal of Financial and Quantitative Analysis, V (June 1970), 323-327.

[9]Clifton H. Kreps, Jr., "Characteristics of Local Banking Competition," in Banking and Monetary Studies, edited by Deane Carson (Homewood, Illinois; Richard D. Irwin, Inc. 1962), pp. 319-332.