

A WORKING PAPER ON BANK STRUCTURE AND COMPETITION

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This paper is to serve as a working paper to present some controversial issues and to stimulate discussion. It does not necessarily reflect the views of the Federal Reserve Bank of Minneapolis.

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This paper analyzes recent discussion and research in the area of bank structure and competition. A principal objective is to relate the general issues and findings in the area to the administration of the Bank Merger Act and the Bank Holding Company Act. Throughout this paper emphasis is placed on recent and probable future developments in the Ninth Federal Reserve District. It is thus hoped to provide a framework for discussion of potential policy questions in the District.

THE GENERAL CASE FOR COMPETITION IN BANKING

Competition in banking is desired in order to achieve an efficient allocation of resources. The classical economic model is that of perfect competition, with its assumed conditions of many firms producing a homogeneous product, mobility of resources (freedom of entry and exit), and customer knowledge of and responsiveness to price differentials. Given these conditions the market should provide at minimum prices those products or services most demanded by consumers. This output should be achieved with average profits for the industry--not necessarily each firm in the industry--but without excess profits.

Thus to summarize briefly these major assumptions immediately points out several important areas where banking structure and performance depart from the model of perfect competition. These departures are related to the economics of banking and also to the regulatory environment in which the banking industry operates.

Banks do not provide a single homogeneous product but an array of services, many of which are in turn replete with variations (such as "business loans"). Furthermore it is general knowledge that many "banking markets" are served by one or several banks--not a multitude of competing firms.

Mobility of resources in banking is largely circumscribed by a framework of laws and regulatory administration. Freedom of entry is limited by state laws restricting various types of bank facilities and furthermore by regulatory decisions concerning applications for charters or branches (where permitted by law). Not only is entry restricted, but so is the exit of marginal banks. The fact that few banks fail may be attributed to astute management of the nation's banks and/or to careful examination and regulation, but more realistically the infrequency of failures suggests that marginal units are insulated from the full rigors of competition. The further implication is that if marginal units are thus able to earn sufficient profits to survive, then the more efficient units are earning above-average profits. It is recognized that where economic theory argues that departure of marginal units is necessary for competitive vitality, bank regulatory authorities are concerned that the impact of more bank failures on the money supply and on particular communities may be too great a price to pay to ensure full competition. Such concern, however, must be related to the role of the Federal Deposit Insurance Corporation in the contemporary banking system.

It is doubtful that many bank customers have adequate knowledge of prices for bank services and are responsive to price differentials. Most large corporate customers do have the necessary knowledge and responsiveness. Furthermore they have financial alternatives and hence bargaining power with the banks. However, for smaller customers the obscurity of bank prices such as interest charges is demonstrated by current Congressional debate. In addition surveys clearly indicate that smaller customers are less able (or willing?) to deal with nonlocal banks and have less access to practical alternatives to certain banking services, such as small loans.

Price competition in bank services is limited by laws, regulations, and banker attitudes. A principal legal restraint is the prohibition of

interest payments on demand deposits, although some "free services" provided to valued customers may be seen as implicit payment of interest. Within the criteria set by law, interest ceilings on time deposits are administered by the bank regulatory authorities. Some lending rates are also regulated by law. In addition to such legal and regulatory restrictions on pricing policies, many bank managers are reluctant to engage in overt price cutting. The prime rate is a principal example, although it is recognized that some indirect price competition does emerge by bankers' changing compensating-balance requirements and by reclassifying certain customers into or out of the "prime" category. Aggressive competition for new demand deposits by means of reduced service charges has not been common. This may be attributed to bankers' attitudes that reductions in such charges (which some bank accountants see as already too low) would be met by competing banks and that in the aggregate each of the banks would be in a worse revenue position. While such an evaluation concerning the response of competitors and the price-inelasticity of aggregate demand deposits may be valid, notable recent examples demonstrate how individual banks have increased their deposits by providing reduced or no service charges for all or selected categories of customers. Recognizing possible exceptions, in general bankers have preferred to rely on nonprice competitive techniques such as advertising, new services, convenience, "friendliness," and emphasis on developing a broad customer relationship.

While not exhaustive, the preceding comments demonstrate many areas in which banking departs from the rigid assumptions of pure competition. While not meeting the conditions of pure competition--and few industries do--few would argue that banking is a monopoly industry except for the possibility of certain banking services in certain very limited markets.

Most observers agree that banking falls into a rather vague middle area of "workable competition" and that banking practices may be best evaluated in theoretical terms of monopolistic competition or, in some cases, oligopoly. Because banking falls into this rather vague middle area, bank regulators and scholars are concerned with the performance of the banking industry. This concern is augmented by the critical role of the banking system in the nation's economy and its importance to many customers for whom there is no practical alternative for certain banking services.

To try to ensure that banks efficiently serve the public, a framework of laws and regulations has been established. More recently, however, increased emphasis has been placed on stimulating additional competition so that the marketplace would help direct an efficient allocation of resources in banking.* While debatable, such regulatory changes as freer entry into banking, increased merger activity, and additional branch banking have been presented as stimuli to increased competition in banking. Such increased competition is to serve best the public interest. This general concern about bank competition and the public interest will be explored more fully in the subsequent sections of this paper.

* This paper is not concerned with a possible alternative procedure of increased concentration in banking and attendant government control. In such a case public policy would likely be concerned with simulating a competitive environment in order to encourage an efficient allocation of resources.

COMPETITION AND CONCENTRATION

Competition in banking is inter-related with banking structure, and attempts to separate completely these two concepts are necessarily rather arbitrary and debatable. Competition may be seen as a pattern of behavior. The existence and intensity of competition in an industry is suggested by such variables as lending policies, pricing policies, and profitability of the enterprises. Another possible indicator of competition is the rate of innovation in an industry.

The structure of an industry may influence the pattern of competition. Where an industry's resources are concentrated in only several dominant firms, one might expect a noncompetitive pattern of behavior. However, concentration need not necessarily result in a lessening of competition, although it does provide an environment conducive to noncompetitive behavior. Much of the controversy about bank mergers, holding company expansion, and expanded branch banking is centered around the concern that these actions will result in increased concentration in banking. In turn such concentration may result in noncompetitive behavior detrimental to allocational efficiency and the public interest.

A DESIRABLE BANKING STRUCTURE

Which is the most desirable structure of banking? This is the question which should be raised by legislators and regulators in considering actions which affect the banking structure. Two principal features of bank structure are: 1) whether the public is better served by a multitude of small banks or by fewer large banks; and 2) whether the public is better served by unit banking or branch banking.* In trying to evaluate which structure

* Bank holding companies may be seen as a hybrid between these two extremes. However, studies of their operating policies suggest that they are more like branch systems. Furthermore, holding companies generally arise to circumvent branching restrictions, and they are probably a first step toward branching. Holding companies are further discussed later in this paper.

"best serves" the public one should try to relate the total social costs to the total social benefits.

Furthermore, the two aspects are related in that extensive branch banking will likely result in the concentration of banking resources in a limited number of large institutions, while emphasis on a structure of unit banking implies a large number of small institutions. This relationship is understood by proponents of unit banking who argue that extensive branching privileges will lead to the demise of small, local banks as separate entities and result in a concentration of banking resources to the detriment of small, outlying communities. Advocates of large branch systems argue--although less explicitly--that the size of their institutions permits the provision of more diverse services at lower prices to bank customers. Implicit in this argument is the assumption of economies of scale in banking and that such benefits will be passed on to bank customers.

The present banking structure in most states lies somewhere between the extremes of complete unit banking with a multitude of very small institutions and a branching system completely dominated by several very large banks. Recognition of these extremes is important, however, because legislators by a change in laws or regulators by a series of ad hoc rulings may facilitate an unintended, almost inexorable, movement toward concentration--particularly if the chartering of new banks is severely restricted.

In the past the debate about large branching systems and small unit banks has been largely conducted by presenting qualitative pros and cons. Recently several studies have tried to define the issues more precisely and then analyze various features of bank structure. While it has been hoped that such analyses might provide a definitive answer as to the desirable banking structure, the findings to date are not unequivocal.

Attempts have been made to determine whether branch systems differ systematically from unit banks concerning the quantity and quality of services offered and the pricing of such services. The two principal methodologies have been: 1) aggregate comparisons of operating characteristics between branch banks and unit banks; and 2) comparisons of operating characteristics before and after an independent unit bank has been absorbed and converted into a branch.

A principal finding of these studies is that branch systems generally have higher loan-to-deposit ratios than do unit banks of similar size. While this finding suggests that branch systems are more fully meeting the loan demands of their areas, this aggregate finding neither confirms nor refutes the allegation that branch systems place more emphasis on consumer loans and loans to large customers, to the detriment of small, local businessmen and farmers.

Concerning the pricing policies of branch systems and unit banks the statistical evidence is not completely clear. In areas with branch banking interest rates on many types of loans seem to be lower and the interest paid on time deposits seems to be higher. These findings emerge principally from the "before and after" studies of areas recently opened to branch banking. When a unit bank is acquired by a branch system the rate paid on time deposits is almost always raised to the level paid throughout the system. However, another principal finding is that service charges on demand deposits are generally raised to the prevailing level in the system. Thus it is no means clear that the absorption of a unit bank by a branch system benefits all of the local customers.

Branch systems proclaim their ability to provide a greater variety of banking services to a local market. The evidence concerning this claim is also ambiguous. A branch in a rural area may claim to provide such services as trust facilities and foreign exchange, but these are usually provided

through the head office. Furthermore, a unit bank can provide such services, when desired by local customers, through its correspondent bank relationships.

Recent research has attempted to test the hypothesis that there are economies of scale in banking. (As mentioned, proponents of branch banking and a liberal merger policy have generally assumed the existence of economies of scale.) The studies to date have been confronted with many conceptual and data problems. Recognizing the limitations of these studies, they do suggest that there are significant economies of scale until banks reach the deposit size of around \$10 million. Beyond this area, significant economies of scale have not been found--although this may be changing due to the recent advent of computer applications. The finding that significant economies of scale do exist up to at least \$10 million in deposits is particularly relevant for the Ninth district, with its multitude of small banks. That many banks in the District are of less than efficient size suggests that their customers are paying higher prices and/or receiving fewer services and/or that the shareholders are not receiving an adequate rate of return on their investment. This issue is further developed in this paper.

BANK STRUCTURE

Much of the recent debate and research in banking has been stimulated by observable trends in the banking structure. A principal trend since the 1930's has been a gradual decline in the number of banks, at first largely attributable to bank failures and more recently due principally to bank mergers. Until very recently the number of banks thus disappearing as separate institutions has more than offset the entry of new banks. A second major trend has been the relative growth of branch banking as the number of unit banks has declined. This trend is related to such phenomena as liberalization of state laws and regulatory policies concerning new branches,

increased emphasis on retail banking, absorption of unit banks into branch systems, and the decision of some unit banks, where permitted, to establish branches. A third major concern, although the data are less conclusive, has been the observation that in certain markets banking resources have become more concentrated in several large banks. Each of these three major trends is related to the issues of bank mergers and bank entry.

Bank Mergers*

Many firms in American industry have grown by merger. Therefore it is not unusual that in the postwar years many banks chose to grow by merger. This growth route is more appropriate in areas permitting branch banking, because only in these areas can the absorbed bank be maintained as an office of the branch system.

Expanding a branch system by acquiring an existing bank is seen by many bankers as a more efficient procedure than branching de novo. In acquiring an existing bank, the system acquires the management and community "good will" of the absorbed bank. The alternative procedure of entering a community with a de novo branch means that the branch will have to compete with the existing local institution and it may be a long while before the branch develops to a break-even point. For reasons such as these it has been found that an absorbing bank has frequently been willing to offer a premium for the shares of a smaller bank.*#

* Recognizing that there are legal distinctions among the concepts of merger, consolidation, and absorption, for purposes of economic analysis this paper uses the terms interchangeably.

*# If the shares of the larger bank are selling at a higher price-earnings multiple than are the shares of the smaller bank, the larger bank may offer a premium to the shareholders of the smaller bank and yet directly benefit because the earnings of the absorbed bank are now being valued at the higher price-earnings multiple.

In addition to the economics of the choice between branching by merger and branching de novo, a principal determinant has been state law. Several states, such as New York and Virginia, have recently liberalized their branching laws, although basically requiring that such branching be done by acquiring existing banks. De novo branching is severely limited. Such laws may be the only way to obtain the acceptance of branching by smaller banks, but these laws are of doubtful merit as appropriate public policy. As is discussed later in this paper, such laws result in a concentration in banking through the merger process rather than the introduction of new, competing facilities in local markets.

The recent merger pattern in the Ninth district clearly confirms the preceding analysis. During the years 1960-66, there were 10 merger decisions in four states:*

Minnesota	1
Montana	0
North Dakota	3
South Dakota	6

Most of the merger activity was in South Dakota, which permits branch banking. The explanation for the mergers in North Dakota relates to the enforcement of a state law prohibiting the making of loans at paying and receiving stations. The relative infrequency of mergers in the District is in marked contrast to the intense merger activity in such branching states as New York, Ohio, Pennsylvania, Virginia, and the Carolinas.

The Bank Merger Act of 1960 was passed to provide guidelines to the government agencies supervising bank mergers. Basically the responsible agency was to consider each proposed merger in terms of several principal criteria:

* Some merger decisions involved the acquisition of more than one bank. Latest available figures from the Comptroller of the Currency are those through 1964.

1. Banking Factors
 - a. Financial history and condition
 - b. Capital adequacy
 - c. Future earnings prospects
 - d. General character of management
 - e. Consistency with the Federal Deposit Insurance Act
2. Convenience and needs of the community to be served
3. Effect of the transaction on competition (including any tendency toward monopoly)

Several of these criteria, such as "convenience and needs" and "competition," are very vague concerning definition and measurement. Furthermore, the Act provides no guidance as to the weighting of each of these criteria. Congress passed these problems on to the regulatory agencies--until later intervention by the courts.

The Bank Merger Act further provided areas of regulatory responsibility in supervising bank mergers. The Comptroller of the Currency was responsible when the absorbing bank was a national association, the Board of Governors when the absorbing bank was a state member, and the Federal Deposit Insurance Corporation when the absorbing bank was a state nonmember. In all cases the Justice Department was to provide its opinion concerning the "competitive factor." As noted, however, the appropriate agency was to weigh competition along with other criteria in making its decision.

Rather than consider the merger decisions of each of the bank regulatory agencies, it may be noted that during the period January 1962-June 1965 the Board considered 107 merger cases.* It approved 97 applications and denied 10. Banking factors were a principal consideration in 43 approvals, and among the banking factors the probability of improved management received most emphasis. The "convenience and needs" factor was the major or significant consideration in 51 cases. The 10 denials were based on the judgement "that

* Based on a statement by Governor Mitchell, Federal Reserve Bulletin, September 1965, pp. 1248-1253.

the proposed merger would appreciably lessen competition in one form or another." (It should be noted that during the same period the Justice Department disapproved of a majority of the mergers when considering the "competitive factor.")* Table I is a reprint of a tabulation of the factors considered in approvals and denials of merger applications by the Federal Reserve Board during a period of three and one-half years.

At the time of the Bank Merger Act it was generally believed in the banking community that bank mergers, when approved by the appropriate regulatory agency, were largely removed from the purview of the courts. As noted above, the role of the Justice Department was seen as providing an opinion concerning the competitive factor in a proposed merger, and the agencies could judge that other factors outweighed a possibly adverse competitive factor.

When the Comptroller approved the merger of the second and third largest banks in Philadelphia, the Justice Department went to court to undo the merger. The Justice Department based its case principally on the Sherman Act and Section 7 of the Clayton Act. The Supreme Court upheld the Justice Department.

In the process and aftermath of the Philadelphia case, there was extensive discussion about the issues of bank competition. The Justice Department and the Court in its decision placed much emphasis on concentration ratios as measures of the competitive environment. Concentration ratios measure the percentage of the market held by the largest, or several largest, firms. For example, General Motors may control 50 per cent of the domestic automobile market; and the Big Three together may control 95 per cent. However, what is the relevant "market" in banking? Here there are two principal areas of debate. First, what is the relevant trade area of a bank? In the Philadelphia case, the bank basically claimed the northeastern United States,

* Cohen and Reid, "The Benefits and Costs of Bank Mergers," Journal of Financial and Quantitative Analysis, December 1966, p. 25.

TABLE I

FACTORS CONTRIBUTING TO APPROVALS AND DENIALS
OF MERGER APPLICATIONS BY
FEDERAL RESERVE BOARD, JANUARY 1962-JUNE 1965

Factor	1962	1963	1964	1965 ¹	Total
Competitive					
Neutral	20	17	10	9	56
Somewhat adverse.....	7	10	2	2	21
Substantially adverse.....	8	3	3	.....	14
Somewhat favorable.....	5	3	3	2	13
Substantially favorable.....	2	1	.....	.....	3
Total.....	42	34	18	13	107
Convenience and needs					
Neutral	11	7	6	1	25
Broader services:					
Somewhat favorable.....	9	12	2	.....	23
Substantially favorable.....	9	3	5	5	22
Higher lending limit:					
Somewhat favorable.....	.....	1	.....	1	2
Substantially favorable.....	.....	3	3	3	9
Both services and lending limit:					
Somewhat favorable.....	2	3	.....	1	6
Substantially favorable.....	11	5	2	2	20
Total.....	42	34	18	13	107
Banking factors					
Neutral	20	6	4	6	36
Management:					
Somewhat favorable.....	7	4	7	4	22
Substantially favorable.....	4	14	6	.....	24
Earnings:					
Somewhat favorable.....	.....	2	.....	.....	2
Substantially favorable.....	.....	.....	.....	2	2
Management and earnings:					
Somewhat favorable.....	.....	2	.....	.....	2
Substantially favorable.....	3	2	.....	.....	5
Capital:					
Somewhat favorable.....	.....	.....	1	.....	1
Substantially favorable.....	2	1	.....	.....	3
Management and capital:					
Somewhat favorable.....	.....	1	.....	.....	1
Substantially favorable.....	2	.....	.....	.....	2
Common ownership:					
Substantially favorable.....	4	2	.....	1	7
Total.....	42	34	18	13	107

¹ Through June.

Source: Federal Reserve Bulletin, September 1965, p. 1252.

while the Justice Department and the Supreme Court held it to be the narrower four-county area. Second, what is the relevant line of commerce for a bank? In the Philadelphia case, the bank claimed that it was providing a variety of financial services and therefore its role should be measured in relation to the aggregate of financial assets of banks and other financial intermediaries, such as saving and loan associations and small loan companies. Again the Justice Department and the Supreme Court took a narrower view, stating that "commercial banking" was a distinctive line of commerce. Based on these interpretations of the relevant market by the Supreme Court, it found that the merged institution would control more than 30 per cent of the commercial bank deposits in the four-county area; and that such increased concentration was "inherently likely to lessen competition substantially."

The Philadelphia case was important for several major reasons. It clearly brought bank mergers under the review of the courts. It stimulated much debate and research on questions of banking competition and bank structure.* It explicitly set a criterion that a merger which resulted in the surviving bank's having more than 30 per cent of the relevant market was presumptive evidence of possible monopoly.

Subsequent court rulings before and after the Bank Merger Act of 1966 have generally upheld the Justice Department in its emphasis on the competitive factor in judging the merits of bank mergers. Furthermore the burden of proof is largely on the banks to demonstrate that alleged advantages of a proposed merger outweigh possible adverse effects on competition.

Bank Entry

Whether new banks can readily enter a trade area is an important adjunct of merger policy. As developed earlier in this paper, the merger process results in a decline in independent banking units. Only the chartering

* Several of the more important articles are reprinted in the volume Studies in Banking Competition and the Banking Structure, published by the Office of the Comptroller of the Currency, 1966.

of new institutions can offset such a decline in the number of banks.

A dilemma of bank regulatory policy is that often a certain authority charters new banks while another authority passes on merger policy. State authorities charter new state banks while the Board of Governors and the Federal Deposit Insurance Corporation regulate mergers. Yet each of these areas of decision effect a state's banking structure, suggesting that these various authorities should have a similarly-defined objective as to the desirable banking structure and then coordinate their decisions to achieve this objective.

Table II is a tabulation of newly-chartered banks in four states of the Ninth district during 1960-66.

TABLE II
New Banks Chartered in Four States
of the Ninth District, 1960-66

	<u>State Charter</u>	<u>National Charter</u>	<u>Total</u>
Minnesota	25	13	38
Montana	14	3	17
North Dakota	8	4	12
South Dakota	<u>5</u>	<u>1</u>	<u>6</u>
Total	52	21	73

Recognizing that other variables such as metropolitan development are important, the preceding data demonstrate the importance of new bank formation to meet changing public needs in unit banking states. In South Dakota, with branch banking, the number of new banks was about equal to the number of banks lost through mergers.

In states where permitted, an alternative method of entry is for an out-of-town bank to establish a de novo branch in a new trade area. Although such de novo branching provides an additional banking alternative in a local trade

area, some state laws severely restrict the ability of banks to establish de novo branches in communities with established local banks. This situation provides a dilemma for bank regulatory authorities in some merger decisions.

A community with an established bank may warrant the broader services and managerial abilities of a new facility. Whether a new unit bank is formed depends on the existence of potential organizers and approval of the bank chartering authority. Whether a de novo branch is established may be limited by state law. If these two opportunities to provide a new, additional facility are closed, then the regulatory authority may feel compelled to allow the existing bank to be absorbed by an out-of-town branch system. Such a merger does not provide the competitive stimulus of a new facility, it merely changes the ownership of the existing facility in the hope that the new owners will better serve the community.

The preceding comments demonstrate how merger policy is closely intertwined with the issues of chartering policy and branching. Furthermore, the authorities regulating mergers do not have much control over these other relevant variables.

Bank Holding Companies

Bank holding companies are a significant factor in the bank structure of the Ninth Federal Reserve District.

In passing the Bank Holding Company Act of 1956, Congress had several principal objectives. One, it wanted to control the expansion--especially interstate expansion--of bank holding companies. Two, it wanted bank holding companies to divorce themselves of nonbanking activities, to prevent possible conflicts of interest in decisions of bank affiliates. Three, interbank transactions within a group were carefully circumscribed.

Administration of the Bank Holding Company Act was delegated to the Board of Governors. Bank holding companies which controlled two or more banks were to be registered with the Board and were to obtain prior approval of the

factor ("whether the effect of the proposal would be to expand the size or extent of the bank holding company system involved beyond limits consistent with adequate and sound banking, the public interest, and the preservation of competition in the field of banking"). As with the Bank Merger Act, several of the criteria are quite vague, and there is no guidance as to appropriate weighting of the factors.

Since passage of the Bank Holding Company Act of 1956, the Board of Governors has made a number of rulings and several important ones have involved institutions in the Ninth district.

In a general survey of rulings from 1956 through 1962, Professor Jules Backman found that the competitive factor was given the "greatest weight" in the Board's decisions.* "The extent of competition usually has been measured by the magnitude of overlapping deposits or customers in common." These findings by Backman are confirmed by the Board's statement in the case of the proposed Morgan New York State Corporation where it stated that:

...while all of the statutory factors must be considered by the Board, the fifth factor relating to competition must be regarded of special significance.

and further:

...the Board cannot approve the proposed transaction unless its adverse effects on banking competition are so clearly outweighed by favorable considerations related to the first four statutory factors as to make it appear that consummation of the transaction would be in the public interest.*#

* Jules Backman, "The Bank Holding Company Act," The Bulletin of the C.J. Devine Institute of Finance, April-June 1963, p. 46.

*# Federal Reserve Bulletin, May 1962, pp. 580-581.

Thus, in evaluating proposed holding company formations or acquisitions, the Board has assigned great weight to the competitive factor.

While several have been approved, a number of proposed bank holding company formations or acquisitions have been denied in the Ninth Federal Reserve District. First Bank Stock was permitted to acquire The First State Bank of Babbitt and Northwest Bancorporation was permitted to acquire The First National Bank of Hoyt Lakes and The First National Bank at Eveleth. Montana Shares, Incorporated, was allowed to acquire additional shares in three banks in which it already had an interest. However, in some important decisions the Board denied the applications of Northwest Bancorporation to acquire the proposed Northwestern State Bank, Rochester, the proposed Roseville Northwestern National Bank, and The First National Bank of Pipestone. First Bank Stock was not permitted to acquire The First Eastern Heights State Bank of St. Paul. Furthermore, the formation of two bank holding companies was denied: Bancorporation of Minnesota and First Montana Bank Corporation. Without going into detail about the Board's denials, it seems evident that it is concerned about the existing concentration of Minnesota bank resources in the two major groups and it favors the establishment of new, independent banks rather than new group banks. Appendix II provides a bibliography of the Board's decisions involving bank holding companies in the Ninth district.

Chain Banking

More information is desirable concerning the extent and pattern of chain banking in the Ninth district. Several features of chain banking have important implications for bank competition and regulatory policy concerning bank mergers and bank holding company acquisitions.

Banks in adjacent market areas may be part of a chain, hence there is unlikely to be much effective competition among these units. Not to recognize these links may lead regulators to assume that there is more competition than in fact exists.

A related point is that some mergers in the Ninth district have been approved largely on the basis that the proposed merger partners already had common ownership and therefore were not really competitive.* Such mergers would not reduce competition that already did not exist. Such reasoning, while not invalid, does provide an impetus for groups of individuals to acquire control of several banks, recognizing that such de facto control can be used to justify subsequent mergers.

The fact that more bank holding companies have not been formed in the Ninth district is surprising, unless a possible explanation is that groups of individuals find chain banking to be more useful for their purposes. Banks in chains can claim to be "independent." Furthermore, the chain escapes the regulation of the Bank Holding Company Act of 1956, with its requirements that nonbanking activities be divorced and that proposed acquisitions of new banks be approved by the Board of Governors. As a further consideration the chains are latent branch systems. If state branching laws should be liberalized, one must anticipate a spate of merger applications as the units in a chain are consolidated into a branch system.

Correspondent Banking

Correspondent banking relationships have important implications for bank structure. As previously noted, small unit banks are able to provide an important array of services to their customers by means of drawing on the resources of their city correspondents. Such services provided through the correspondent banking system include loan participations, administration of trusts, and foreign credit arrangements. Because such services can thus be provided by small unit banks, the correspondent banking system does provide an important alternative to extensive branch banking. If officials of small banks effectively use the services available to them from their city correspondents and if the services thus offered by the city correspondents keep pace with the

* For example, the acquisition of the Farmers & Merchants State Bank, Roslyn, by the Security Bank, Webster, South Dakota; and the acquisition of three

rapid changes in technology and customer needs, then bank mergers, based on such criteria as convenience and needs of the public or improved management, should not be very necessary.

Correspondent banking may affect bank structure in other ways. Recent studies by the Patman committee point out the important role of bank loans made on hypothecated bank stock. The implication is that such loans may give the lending institution some measure of control over the policies of the bank the stock of which has been pledged as collateral. A related implication is that such loans may be used to finance extensive chain banking systems with minimal equity investment. The Ninth district accounted for 15 per cent of the bank stock loans made in 1962; and of the 11 banks most active in such loans (out of the largest 200 banks), two were in Minneapolis.*

A very recent survey provides further information concerning loans on bank stock. In Minnesota there were 85 reported changes in control of insured banks during the period September 12, 1964, through December 31, 1966. Of these 85 changes, approximately 52 involved a bank loan secured by the stock of the newly-acquired bank.*# These bank stock loans were generally made by major correspondent banks in the Twin Cities and Chicago. Among the city correspondents making such loans are several self-proclaimed "independent" banks. Yet how closely are these banks involved in chain banking in the area?

While such bank stock loans may indicate present or potential chains, they also relate to bank structure by making the shares of small, closely-held banks more liquid. The fact that such shares are readily acceptable as collateral for loans at favorable terms broadens the demand for such shares by individuals. More people are able to finance the purchase of control of a small bank by means of a minimal equity investment and a substantial loan

* "The Structure of Ownership of Member Banks and the Pattern of Loans Made on Hypothecated Bank Stock," Committee on Banking and Currency, U.S. House of Representatives, 1964. p. 14.

*# "Acquisitions, Changes in Control, and Bank Stock Loans of Insured Banks," Committee on Banking and Currency, U.S. House of Representatives, 1967, pp. 69-73.

from a city correspondent. This situation provides a possible alternative to the need for mergers of small banks based on the argument that the existing owner wants to sell his interest and cannot find a buyer other than a branch system or a holding company. With the use of bank stock loans, there may be more potential buyers of such an institution.

Trust departments of city correspondents at times hold shares of other commercial banks, over which shares they have various degrees of voting power. Such relationships are rather limited in Minnesota, although the First National Bank of Minneapolis does hold over 10 per cent of the shares of eight Minnesota banks.*

The preceding comments about correspondent banking are intended to show how this activity may relate to other features of bank structure, such as mergers, holding companies, and chain banking. Another indicator of the role of correspondent balances is that in 1957 interbank balances accounted for 30 per cent of demand deposits in Minneapolis.*# Yet only very recently has information been made available on certain features of the correspondent system. Further study of the present and potential role of this system in the Ninth district seems warranted, particularly in view of the changes implied by the demise of nonpar banking and the advances in computer applications in banking. Also, what has been the role of city correspondents in the formation of new, independent suburban banks in the District?

* "Control of Commercial Banks and Interlocks Among Financial Institutions," Committee on Banking and Currency, U.S. House of Representatives, 1967, p.15.

*# Carson and Cootner, Research Study Two, Private Financial Institutions, Commission on Money and Credit, p. 94.

SUMMARY AND CONCLUSIONS

As developed in this paper, administration of the Bank Merger Act and the Bank Holding Company Act is interrelated with other facets of bank structure. State laws provide much of the framework of bank structure, and in the Ninth district merger activity has been minimal because of the emphasis on unit banking. If state laws were changed to permit liberalized branching, one must anticipate a deluge of merger applications as branch systems are developed.

Applications to form and expand holding companies have also been relatively infrequent in the District, but here the limiting factor apparently has been the Board of Governors' series of decisions disapproving applications by District holding companies. In its decisions the Board has expressed its concern about concentration of banking resources in various markets of the District.

While the two major groups have thus been limited in their attempts to expand, it is very probable that chain banking has led to the development of nonregulated groups of banks, with possible concentration of banking resources and reduced interbank competition. As are the holding companies, these chains are latent branch systems which will quickly require many merger decisions if states in the District should move toward branch banking.

Thus a major question is what probable (or possible) changes may occur in state banking laws. The increasingly urban orientation of state legislatures, the links of chain banking, and the possibility of elderly owners of smaller banks desiring to sell their interests at attractive prices all suggest a gradual shift toward increased acceptance of some form of branch banking. The timing of such a change is open to considerable conjecture. However, the probability of such a change points out the need for careful analysis by bank supervisory authorities before such legislative change. Such analysis should help ensure that legislative changes reflect the public's interests,

in addition to those of the banking industry.

As developed in this paper, some states have liberalized their laws concerning branch banking by permitting the acquisition of existing banks while severely restricting the establishment of de novo branches. While bankers may prefer this procedure, it is of dubious value from the point of view of the public interest. If branching were liberalized, almost certainly this will result in increased concentration in banking; and such a situation dramatizes the probable need for a liberal chartering policy to permit the entry of new, independent banks. Here the need should be obvious for cooperation among chartering authorities and the authorities regulating bank mergers.

Which banks will be the principal beneficiaries of branch banking in the area? The ruling in the Philadelphia case concerning 30 per cent of the market as presumptive evidence of possible monopolistic conditions, the Board of Governors' decision in the Morgan New York State Corporation case, and the Board's expressed concern about the present concentration of bank assets in the two major groups all suggest that these two groups will be constrained in attempts to develop branch systems by acquiring additional established banks. The informal chains seem better placed to expand by acquisition while the two groups will have to branch de novo, if permitted.

In many states branch banking has been permitted on a limited basis, such as in one county or in contiguous counties. This may result in concentration in these local areas, but there continues to be a number of medium-size banks in these states. In view of findings of economies of scale in banks up to \$10 million in deposits and postwar changes in rural trade areas, some form of county-wide branching might be considered in the unit-banking states of the District. However, an impediment to such a procedure in these states is the fact that the two principal holding companies control major

banks in many of the counties, which in turn would probably become the nuclei of such county-wide branch systems. This would result in increased concentration of bank resources in these two groups.

While it is critical to anticipate the implications of changes in state banking laws, continuation of the present framework also is related to problems of bank regulation.

Past regulatory decisions and court rulings demonstrate the manifold problems of defining and measuring the rather vague criteria of the Bank Merger Act and the Bank Holding Company Act. Recognizing the existence of these problems, it does seem necessary to develop better information concerning the banking markets of the District. The Federal Reserve Bank of Chicago has conducted some pilot studies in its District, and such research seems warranted in the Ninth district. Studies of customer behavior should try to measure customer responsiveness to price and service inducements by various banks and the willingness and ability of customers to change banks. Such customer behavior would facilitate effective competition among banks. Furthermore studies of banking markets should try to determine how well existing banks are meeting their customers' needs. In view of the changing agricultural structure of the region, it is of particular importance to determine whether agricultural credit is being provided by county banks and the correspondent system.

In addition to the "public convenience and needs" factor, bank mergers relate to the banking factors--especially management. While less so in the Ninth district, elsewhere many bank mergers have been permitted because the absorbed bank claimed that it was confronted by a "management succession" problem. However, such a problem can surely be created by a small bank to justify its selling out to another institution. If a small bank cannot pay enough to attract younger potential management, then it is a marginal operation

which perhaps should be liquidated. If it can pay a competitive salary (recognizing various monetary and subjective fringe benefits) and yet cannot recruit the desired talent, this suggests that the pool of potential bank managers is inadequate; and, if so, this should be of concern to bankers and bank regulators. If the pool is found to be inadequate, then steps should be taken to broaden this pool rather than use the situation as a principal justification for extensive bank mergers.

Bank regulatory authorities also have some measure of control over other of the banking factors. Bank earnings relate to such variables as capital requirements, reserve requirements, loan and investment decisions, and interest-rate ceilings, each of which is to some extent controlled by the bank regulatory authorities. Bank management methods might be improved by the authorities' making available to banks more information about new management methods in banking and more data, such as functional cost figures, that bank managers can use to control their institutions effectively.

Basically it is found that bank merger policy is interwoven with many other variables in banking, over which the authorities have varying degrees of control. Even state laws, which determine much of the banking structure, can be influenced by the regulators. Therefore, it is imperative that the bank supervisory agencies in an area develop a cohesive policy concerning a desirable banking structure. Then decisions on particular merger cases can be made in the context of the broader policy objective. Furthermore, in analyzing particular cases, the regulatory authorities should weigh the proposed merger against alternative procedures for achieving the desired banking structure. As suggested throughout this paper, there are various ways by which the public can be provided with the benefits of a competitive, dynamic banking system.*

* The proposed acquisition of the First National Bank of Ely, Minnesota, by Northwest Bancorporation provides an important case to test some of the ideas developed in this paper.

Factors Considered by Federal Reserve Board in Connection with Proposed Acquisitions by Holding Companies, Between 1956 and December 1962

<i>Bank to be Acquired</i>	<i>Convenience, Needs, and Welfare</i>	<i>Competition with Holding Co. Subsidiaries</i>	<i>Concentration</i>	<i>Alternative Sources of Service</i>	<i>Other Financial Institutions</i>	<i>Competitive Position of Other Banks</i>
UNION TRUST CO. (8)	+			X	X	
NEW HAMPSHIRE NATIONAL BANK (10)	+		X		X	
KENTON SAVINGS BANK (14)	+		X			
CALIFORNIA BANK (15) . . .	0	LL,M	X	X		X
FIRST NATIONAL BANK, EVELLETH (16)	+	M				
FILLMORE STATE BANK (17)	+	M	X	X		
AMERICAN NATIONAL BANK (18)	0		X	X		
PIWAI'KLE STATE BANK (19)	+	C	X		X	
EASTERN HEIGHTS STATE BANK (23) <i>(denied)</i> . . .	0		X	X		X
PURCELLVILLE NATIONAL BANK (24)	0	M	X	X		
PEOPLES' TRUST & SAVINGS (25)	0	M	X	X		X
PEOPLES' NATIONAL BANK (26)	0		X	X		X
GUILFORD TRUST (27) . . .	0		X	X		X
FIRST NATIONAL BANK OF POUGHKEEPSIE (28) . . .	0		X	X		X
MANUFACTURERS NATIONAL BANK OF NORTH ATTLEBOROUGH (29) . . .	0		X	X		X
BANK OF COMMERCE (32) . . .	+	M	X	X	X	
FALLS CHURCH BANK (33) . . .	0	M,C	X	X	X	X
FIRST NATIONAL BANK OF PIPESTONE (34) <i>(denied)</i> . . .	0	M	X	X	X	X
HILLIARD BANK (35) <i>(denied)</i>	0	M	X	X		
WISCONSIN STATE BANK (37) <i>(denied)</i>	0		X	X	X	X
RICHMOND BANK & TRUST Co. (40)	+	M	X	X	X	
SANPETE VALLEY BANK (41)	+		X	X		
WISCONSIN STATE BANK (42) <i>(reversed denial)</i>	0		X	X	X	X
NATIONAL MANUFACTURERS BANK OF NEENAH (45) . . .	0			X	X	
CARBON EMERY BANK (46) <i>(denied)</i>	0	M	X	X	X	X
COMMERCIAL BANK OF ST. LOUIS COUNTY & LINDBERGH BANK (48)	+			X	X	X
SECURITY STATE BANK (51) . . .	+	M	X	X	X	X
FARMERS & MERCHANTS NATIONAL BANK (54) <i>(denied)</i>	0			X	X	X
CENTRAL BANK OF MONTANA (56)	0	C	X	X	X	
SOUTHERN BANK, PEOPLES' BANK & SHENANDOAH COUNTY BANK & TRUST (57)	+	M	X	X	X	X
SECURITY NATIONAL BANK OF LONG ISLAND (59) <i>(denied)</i>	0	M,C	X	X	X	X

M Management
 C Capital
 LL Loan Limits
 + Affirmative
 0 Neither affirmative nor adverse
 X Evaluated as a factor

Source: Jules Backman, "The Bank Holding Company Act," The Bulletin of the C. J. Devine Institute of Finance, April-June 1963, pp. 28-29.

Appendix II

A Bibliography of Decisions by the Board of Governors Concerning Bank Holding Companies in the Ninth District 1956-66*

1. First Bank Stock Corporation
First State Bank of Babbitt, Minnesota
Approved
Federal Reserve Bulletin, January 1958, p.8.
2. Northwest Bancorporation
First National Bank of Hoyt Lakes, Minnesota
Approved
Federal Reserve Bulletin, January 1958, p. 9.
3. Northwest Bancorporation
proposed Northwestern State Bank, Rochester, Minnesota
Denied
Federal Reserve Bulletin, January 1958, pp. 11-13.
4. First Bank Stock Corporation
First Eastern Heights State Bank of St. Paul
Denied
Federal Reserve Bulletin, September 1958, pp. 1061-1065.
Federal Reserve Bulletin, May 1960, pp. 486-496.
5. Northwest Bancorporation
The First National Bank at Eveleth, Minnesota
Approved
Federal Reserve Bulletin, February 1959, pp. 147-149.
6. Northwest Bancorporation
The First National Bank of Pipestone, Minnesota
Denied
Federal Reserve Bulletin, April 1961, pp. 408-411.
Federal Reserve Bulletin, July 1962, pp. 814-822.
7. Northwest Bancorporation
proposed Roseville Northwestern National Bank, Roseville, Minnesota
Denied
Federal Reserve Bulletin, August 1961, pp. 919-923.
Federal Reserve Bulletin, November 1961, pp. 1289-1293.
8. Montana Shares, Incorporated
Central Bank of Montana, Great Falls (and two other banks)
Approved
Federal Reserve Bulletin, October 1962, pp. 1285-1290.

* Some other decisions were made, but they were related to rulings about insurance and agricultural credit affiliates and applications to increase interests in affiliated banks from a minority to a majority.

9. Bancorporation of Minnesota
proposed fromation of holding company
Denied
Federal Reserve Bulletin, August 1965, pp. 1085-1094.
10. First Montana Bank Corporation
proposed formation of holding company
Denied
Federal Reserve Bulletin, July 1966, pp. 971-976.