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Competition for Banking Services: Three Analyses

District Conditions

Competition for Banking Services: Three Analyses

Three inquiries are made into competition in the financial market. Each article evaluates effects on the existing financial environment that might result from possible changes in bank regulation.

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Produced in the Research Department by Sharon Johnson (editorial) and Kathleen Rolfe (visuals).

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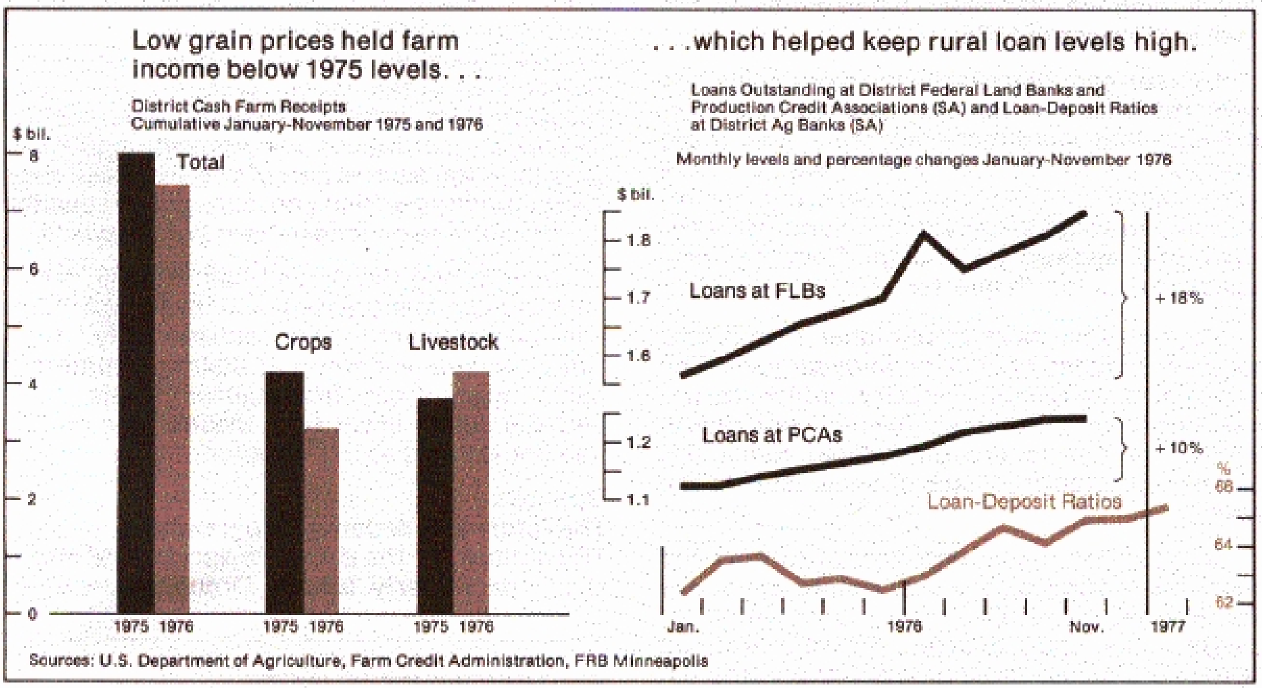
District Conditions

Second Half '76 Review:
The recovery slowed somewhat

Farming provided little stimulus to district economic activity last year. But other sectors were strong enough to prevent a general downturn in business activity, and overall district employment exceeded the prior year's level. The drought and reduced commodity prices lowered farm income, curtailing spending and increasing credit demands. Homebuilding and manufacturing, however, were considerably improved over 1975.

Greatly increased marketings of cattle and hogs reduced livestock prices during the year, but receipts still exceeded 1975's pace. Grain prices were also depressed because of record crops throughout the nation, and as a result, district cash crop receipts were well below year-earlier levels. The regional drought had a severe impact on yields and production of corn, soybeans, and hay. The South Dakota wheat crop was especially poor, although wheat production in Minnesota, Montana, and North Dakota was up significantly because of good



yields and increased plantings in those states.

These developments took their toll on farm spending, rural retail spending, and farm borrowing. Tractor sales fell significantly after the spring of the year, and the pace of other retail sales in agricultural areas gradually slowed.* Due in part to some farmers' inability to pay back their loans on schedule, loan-to-deposit ratios at ag banks increased nearly 3 percent during the year, and loans outstanding at federal land banks and production credit associations increased about 16 percent in 1976.

The weak agricultural sector provided no stimulus to economic activity in the district. And without this stimulus, other sectors were mixed, with no general pattern of either strength or weakness emerging.

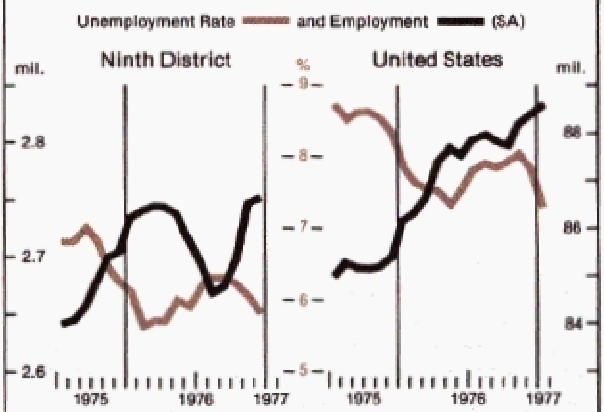
District homebuilding continued to recover during the year and came close to 1972's record pace, primarily due to increases in the number of single-family units built. However, other construction activity was weak, and construction employment declined for three straight quarters, ending the year nearly 8 percent below the level at the close of 1975.

By year-end, manufacturing sales gains had been reported for the fifth quarter in a row, although they were more moderate than those reported earlier in the year. Despite these gains, significant expansion plans did not result, and average employment figures for manufacturing showed no change from the first quarter to the fourth quarter.

District retail sales were higher than a year before but lagged behind the midyear pace. The tourist and recreation industry, which earlier was beset with hunting, fishing, and travel restrictions due to drought-related forest fire danger, suffered from lack of snow later in the year.

By year-end the unemployment rate for the district was down from a year before but above the first half's average. After a substantial increase in the third quarter, the rate declined in each of the last three months, averaging 6.0

Strong job gains dropped district unemployment below 6% by year-end.



Sources: State employment security departments, U.S. Department of Labor

percent in the final quarter. The number of people employed increased in the last part of 1976 after declining in the second and third quarters.

Growth in time and savings deposits at district banks and thrift institutions was somewhat slower than in the nation, probably because of reduced farm income. Nevertheless, district depository institutions experienced significant growth in the second half of the year, and their good liquidity positions encouraged a reduction in rates offered on longer-term time deposits.

Also during the second half of 1976, terms on business loans eased and mortgage loans and commitments grew substantially. Consumer installment credit at district commercial banks grew from first-quarter levels. But, perhaps due to lower farm income, the growth was not as rapid as in the nation.

Outlook:
The future still depends on agriculture
The outlook for the district's agricultural sector is not particularly bright. Drought conditions

*District indicators are seasonally adjusted.

have prevailed in the postharvest months, and extreme deficiencies in soil moisture in many areas practically assure below normal crop yields again in 1977. Acreage diversion from corn to wheat, sunflowers, or other more drought-resistant crops is likely this spring.

The cattle industry appears to be stabilizing, and increased beef prices are probable. But hog prices are likely to be low again in 1977, since anticipated farrowings indicate an increase in the pig crop for the second year in a row. Continued stress in the ag sector would further depress farm and retail spending, and banks may become unwilling to extend credit to certain farm operators.

District manufacturers, according to a recent survey by this Bank, continue to anticipate modest sales gains for early 1977—although they do not anticipate that these gains will generate significant employment advances. Homebuilding activity is expected to continue at a strong pace, and the trade and services sectors may provide some employment growth.

With no overall strength or weakness coming from other sectors, agriculture will continue to have the most significant impact on district economic activity in 1977. Another year of low yields or depressed commodity prices would seriously reduce district income, spending, and debt repayment. However, if weather conditions change and become particularly favorable and if prices to farmers improve, ag income should increase and result in more active spending and improved debt positions.

Competition for Banking Services: Three Analyses

Do commercial banks compete only with each other, or do they compete also with savings and loan associations, mutual savings banks, credit unions, and other financial institutions? This is not just a rhetorical question; a surprising answer by the Supreme Court in 1963 clearly shapes current bank regulatory policy in this country.

In the Philadelphia National Bank case of 1963, the United States Supreme Court decided that commercial banks do not compete with other financial institutions. The message to bank regulators was clear. When they examine the competitive effects of proposed bank mergers or acquisitions, they should ignore the role of nonbank financial institutions. "Philadelphia National Bank Case Revisited," the first article in the following series, argues that the Supreme Court's ruling is deficient; that is, markets should be defined in terms of services rather than firms, and all firms—banks and nonbanks—supplying a given service should be included in the market.

Bank regulators examine competition in banking by looking at individual market shares of certain financial services. Guided by the Supreme Court's decision, regulators have excluded nonbank suppliers from these markets. Our next article, "Measuring Banking Concentration in Minnesota," looks at what happens to market shares of financial services in Minnesota when nonbank firms are included in the market.

Nonbank firms play a very prominent role in the consumer savings market, and that market is likely to undergo significant change with the development of electronic funds transfer systems. The last article, "Competitive Aspects of EFTS," summarizes a research study that projects how banks' and thrift institutions' shares of Minnesota's consumer savings market might change under two possible state laws governing the development of remote electronic banking terminals.

Philadelphia National Bank Case Revisited

Richard W. Stolz*

In a landmark decision, the Supreme Court ruled in the Philadelphia National Bank case of 1963[1] that a proposed merger between two commercial banks in Philadelphia was forbidden by the Clayton Act, one of the country's basic antitrust laws. The Clayton Act prohibits mergers that may substantially lessen competition "in any line of commerce in any section of the country." Therefore, a critical step in the Court's analysis of the competitive effects of the proposed merger was to determine the relevant line (or lines) of commerce.

In the Philadelphia case, the Court ruled that commercial banking was the relevant line of commerce for antitrust purposes.[2] This ruling essentially means that regulatory agencies and the judicial system should ignore the role of savings and loan associations, personal loan companies, and other nonbank financial intermediaries when examining the competitive implications of a proposed bank merger.

The validity of the Court's finding that commercial banking was the relevant line of commerce was questioned at the time of the decision.[3] Moreover, recent developments enlarging the permissible scope of financial services by various types of intermediaries have created new doubts about the validity of the Court's analysis. Since this case continues to shape federal regulatory policy concerned with bank mergers and bank holding company acquisitions, a reexamination of the Court's finding is warranted at this time.

The objective of this article is to critically evaluate the economic reasoning of the Court. The validity of the Court's decision at the time it was made as well as the validity of the decision at the present time will be discussed. A conclusion which emerges is that the Court erred in finding commercial banking to be the relevant line of commerce. We shall maintain that commercial banks are multiproduct firms engaged in producing several economically distinct financial services and that each service comprises a "relevant line of commerce" for antitrust purposes. Therefore, the competitive implications of a proposed merger of commercial banks cannot be adequately evaluated without considering the importance of both bank and nonbank firms on a service-by-service basis.

This article does not address the question of whether the proposed merger should have been permitted or denied. Had the Court defined relevant lines of commerce to be as we suggest, it is entirely possible that the merger would still

*The helpful comments and suggestions of Preston J. Miller and Clarence W. Nelson are gratefully acknowledged. The views expressed in this article are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.

[1] 'U.S. v. Philadelphia National Bank,' 374 U.S. 321 (1963).

[2] Two later Court decisions have reaffirmed the principle that commercial banking is the relevant line of commerce. See 'U.S. v. Phillipsburg National Bank,' 399 U.S. 350 (1970), and 'U.S. v. Connecticut National Bank,' 418 U.S. 656 (1974).

[3] A compilation of papers concerned with this aspect of the decision can be found in U.S., Comptroller of the Currency, STUDIES IN BANKING COMPETITION AND THE BANKING STRUCTURE, PART ONE: MERGER POLICY: THE PHILADELPHIA CASE (Washington, D.C.: Office of the Comptroller of the Currency, 1966).

have been ruled unlawful because of anticompetitive effects in some of these lines.

Reexamining the Court's Ruling

The economic criterion for determining a line of commerce is an empirical one that requires an estimate of how readily consumers will substitute one good or service for another. A line of commerce in economic terms is defined as the collection of all goods or services which are "close substitutes," or "effective alternatives." Thus, two goods are determined to be in the same line of commerce if an increase in the price of one causes consumers to significantly increase their demand for the other. This economic criterion for determining a line of commerce had been accepted by the Court prior to the Philadelphia case.[4]

The Court went beyond this simple economic criterion in order to reach the conclusion that commercial banking by itself is the relevant line of commerce for Clayton Act purposes. The Court argued first that the particular "cluster" of financial services offered by commercial banks is unique to commercial banking and, therefore, "composes a distinct line of commerce."

The Court was correct in observing that commercial banks are multiproduct firms offering a set of services that cannot be offered by other types of financial firms. That observation, however, is not sufficient to conclude that commercial banking constitutes a distinct line of commerce.[5] The cluster argument, taken on its face, would seem to imply that any multiproduct firm offering a unique array of goods or services is its own line of commerce and is, therefore, a monopoly. The Court obviously did not intend this interpretation.

The Court may have meant that the services provided by commercial banks are joint products; that is, they are either provided together or not provided at all. Yet, this interpretation does not hold up either. In the first place, not all commercial banks offer the same set of services. Differences in services are observed, for example, among large city, suburban, and rural banks or even among banks in the same geographic proximity. In the second place, commercial bank services cannot be of the all-or-nothing variety, since other financial firms provide some, but not all, of the services offered by banks.

Although the cluster argument as it applies to commercial banking seems to have little economic content, the Court did attempt to fortify its ruling by demonstrating that certain banking services confronted no effective substitutes from nonbank firms. If it could have been shown that commercial banks were the only suppliers of some important service, then the Court could have argued that in practicality "commercial banking" constitutes a relevant line of commerce for Clayton Act purposes. This is because any analysis of competitive consequences of a merger involving that important service would involve only banks.

The Court acknowledged that many types of institutions were "more or less in competition with commercial banks. . ., for example: mutual savings banks, savings and loan associations, credit unions, personal-finance companies, sales-finance companies, private businessmen (through the furnishing of trade credit), factors, direct-lending government agencies, the Post Office, Small Business Investment Corporations, life insurance companies." Competition refers to the pricing and marketing behavior of firms in a particular line of commerce, or industry. The Court's statement that many institutions were more or less in competition with commercial banks is, then, just another way of

[4] In 'U.S. v. E. I. du Pont de Nemours & Co.,' 351 U.S. 377 (1956), the Court stated, "Determination of the competitive market for commodities depends on how different from one another are the offered commodities in character or use, how far buyers will go to substitute one commodity for another," and the "market is composed of products that have reasonable interchangeability for the purposes for which they are produced—price, use, and qualities considered."

[5] The clustering concept is a well-established legal principle for antitrust litigation. See, for example, 'Crown Zellerbach Corporation v. F.T.C.,' 296 F.2d 800 (1961). This concept may or may not have economic significance depending on whether the cluster is a collection of more or less independent outputs or whether the outputs necessarily are produced in some fixed relation to one another (that is, are "joint products").

saying that nonbank firms offered potential substitutes for many bank services or, equivalently, that nonbank firms were potentially in many of the same lines of commerce as commercial banks. The Court went on to argue, however, that for some important bank services these potential substitutes were not effective and cited the following examples:

- Some commercial banking services "are entirely free of effective competition from products or services of other financial institutions." The Court cited checking accounts as an example of such a service.
- Some commercial banking services "enjoy such cost advantages as to be insulated within a broad range from substitutes furnished by other institutions." Competition with small loan companies in the personal loan market is the example mentioned by the Court.
- Some commercial banking services are freely competitive in terms of cost or price with those provided by other financial institutions, but they "enjoy a settled consumer preference, insulating them, to a marked degree, from competition." The Court's example was savings deposits.

Subsequent sections of this article will examine the empirical validity of the Court's argument that bank customers had no effective alternatives for several major banking services. While only one example from the total list of banking services was cited for each of the Court's three categories of services summarized above, it can be presumed that the Court selected the examples which best supported its case. Therefore, the following evaluation will focus on those examples. Each will be examined from an economic point of view regarding its validity at the time the decision was made as well as its validity at the current time.

(1) The Argument on Distinctive Services

The Court's statement that some banking services are "entirely free of effective competition" is an extremely strong one; it is equivalent to saying that other types of firms do not offer even a poor substitute for the financial service in question. According to the criterion we've set forth, the Court could have concluded that a banking service constitutes a line of commerce merely by showing that no close substitutes are available from nonbank firms.

The Court's example of such a service, checking accounts, is not as simple as it may first appear, because checking accounts really provide two services to the consumer. First, they are a store of funds, a relatively safe and liquid financial asset. Second, they provide a convenient means of payment through the writing of checks drawn on the accounts. If we consider the financial-asset aspect of checking account services, a case for close substitutability between checking accounts and other somewhat less liquid financial assets can be made. Modern theories of the demand for money (including checking account balances) generally include yields on other less liquid but interest-bearing assets as major determinants. These theories were well-established at the time the Court heard the Philadelphia case.[6] Various empirical studies also lend support to the notion that the quantity of demand deposits (checking accounts) is influenced by the rate paid on alternative assets.[7]

If we turn now to the means-of-payment aspect of checking account services, we find that at the time of the decision, the Court could validly maintain that commercial bank checking accounts were a service for which no close substitutes were available from any nonbank firm. By law only commercial banks were empowered to offer checking accounts, and it was true that

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[6]See, for example, William J. Baumol, "The Transactions Demand for Cash: An Inventory Theoretic Approach," QUARTERLY JOURNAL OF ECONOMICS, Vol. 66, No. 4 (November 1952), pp. 545-556, and James Tobin, "The Interest-Elasticity of Transactions Demand for Cash," REVIEW OF ECONOMICS AND STATISTICS, Vol. 38, No. 3 (August 1956), pp. 241-247.

[7]See V. Karuppan Chetty, "On Measuring the Nearness of Near-Moneys," AMERICAN ECONOMIC REVIEW, Vol. 59, No. 3 (June 1969), pp. 270-281, and Tong Hun Lee, "Alternative Interest Rates and the Demand for Money: The Empirical Evidence," AMERICAN ECONOMIC REVIEW, Vol. 57, No. 5 (December 1967), pp. 1168-1181.

checks were more or less distinctive as a means of payment; only cash was as readily acceptable. An option available to the checking account holder in case, say, the costs of checking accounts were raised significantly was that of keeping funds in a savings account, withdrawing them as needed, and making payments in cash. But the service of transferring funds on simple written instruction was not available from any of the nonbank firms, and the cash withdrawal option, while a substitute, could not reasonably be considered a close substitute.

However, the case that commercial bank demand deposits have no close substitutes as a means of payment, valid as it may have been in 1963, is not valid today. Thrift institutions are offering services which are functionally indistinguishable from checking accounts; for example:

- Negotiable orders of withdrawal, a type of interest-bearing payment device, are being offered by both commercial banks and thrift institutions in the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
- Savings banks in New York now have authority to offer checking accounts.
- Many thrift institutions across the country have established limited third-party payment services which can be transacted by telephone or point-of-sale terminals.
- Credit unions are obtaining authority to offer third-party payment services.

These legal and technological realities make it unrealistic to contend today that demand deposits at commercial banks are without close substitutes.[8]

(2) *The Argument on Cost Advantages*

The Court's second conclusion was that cost advantages insulated some commercial bank services from substitutes furnished by other financial institutions. The fact that one firm has high costs while another has low costs is insufficient evidence to conclude that the firms do not provide effective alternatives to the consumer. Theory does not claim that firms in the same industry should have the same cost schedules. The automobile industry, for example, consists of firms with widely different cost schedules and rates of return.

The Court observed that rates charged at personal loan companies were much higher than at banks "in part, it seems, because [loan] companies' working capital consists in substantial part of bank loans." The fact that two firms which produce a similar good or service also have a supplier-customer relationship does not mean the firms do not provide effective alternatives to the consumer. The federal courts have recognized that some firms in manufacturing industries, such as steel or aluminum, supply input to other firms who ultimately compete with them. Those particular industries are characterized by vertically integrated firms which produce ingot or other more or less unfinished goods and which also fabricate finished goods. At the same time, there are less integrated firms that do not produce the unfinished goods but purchase them from larger companies, fabricate them into finished goods, and thus compete with their suppliers.[9]

Along with its observation that small loan companies charge higher rates than banks, the Court reviewed testimony from one banker who stated he did not believe his bank was in competition with loan companies. The Court interpreted this as evidence that the apparent higher cost of working capital for small loan companies forced them to charge higher personal loan rates than banks and that the loan companies could then attract only customers who could not

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[8]Another distinctive service, commercial loans, was listed in the Connecticut case of 1974 as a reason for defining commercial banking as a relevant line of commerce. While we do not develop the argument here, it can be shown that significant nonbank sources of commercial loans do exist.

[9]See 'U.S. v. Aluminum Company of America,' 148 F.2d 416 (1945); 'U.S. v. Columbia Steel,' 334 U.S. 495 (1948); and 'U.S. v. Aluminum Company of America,' 377 U.S. 271 (1964).

obtain bank credit.[10] If it could have been shown that banks served one set of customers (such as "low risk") and small loan companies served only a different, mutually exclusive set of customers (such as "high risk"), then there might have been some justification for concluding that the two did not compete. However, the Court did not establish that this was the case.

Even had the Court established its contention that personal loan companies were competitively disadvantaged *vis-à-vis* commercial banks, the Court still would have failed to address the question of whether effective substitutes existed for commercial bank personal loans. To do that, the Court would have needed to consider all potentially competing firms, not just personal loan companies. Credit unions come immediately to mind as suppliers of unsecured personal loans not suffering the alleged bank dependency of personal loan companies. Consequently, the Court did not, on either specific or general grounds, establish its case that because of cost advantages commercial banks were "insulated within a broad range from substitutes furnished by other institutions."

If we turn to recent evidence, the argument that banks are insulated from competition with small finance companies is not supported. For example, there is evidence that loan volume and the average yield on personal loans at commercial banks decrease as the number of consumer finance companies in the market increases.[11] This evidence suggests that substitutability between personal loans by finance companies and personal loans by commercial banks is significant.

To be certain, some finance companies do specialize in high-risk, "nonbankable" clients and, thus, probably should not be considered to be competing with banks (or with other finance companies, for that matter). However, these firms seem to be a very small portion of all consumer finance companies, and their business does not represent the type of business carried on by most of the other companies.

It is interesting to note that in 1973 the Board of Governors of the Federal Reserve System reviewed the issue of competition between commercial banks and consumer finance companies as part of its regulatory responsibilities under the Bank Holding Company Act. The Board concluded that banks and personal finance companies do compete, because there is a broad spectrum of customers who have similar income, wealth, and risk characteristics that are served by both types of firms and who presumably would be induced to do business with one or the other on the basis of changes in price or other competitive elements.[12]

To summarize, there is no theoretical argument or empirical evidence to support an industry delineation on the basis of cost structures alone. It is not unusual to find high-cost and low-cost firms existing side by side in the same industry. To further argue that firms do not compete because one set supplies certain outputs to another set not only has no theoretical justification but also seems to contradict the Court's own findings in other antitrust cases.

(3) The Argument on Settled Consumer Preferences

The Court's third finding was that some services offered by commercial banks enjoyed a "settled consumer preference" which insulated them to a marked degree from competition. The Court relied on testimony that mutual savings

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[10] The Court apparently assumed that rate difference implied the market was segmented. But reliance on rate differences alone ignores other elements of competition—such as convenience, ease of application, low down payment—that could have an important influence on the effective price to the customer per dollar of personal or installment loan. Interestingly, the Court reviewed testimony that nonprice competition as well as price competition was very important in banking.

[11] See David I. Fand and Ronald W. Forbes, "On Supply Conditions in Consumer Credit Markets," in PAPERS IN QUANTITATIVE ECONOMICS (Lawrence: University of Kansas, 1968); Robert P. Shay, "Factors Affecting Price, Volume and Credit Risk in the Consumer Finance Industry," JOURNAL OF FINANCE, Vol. 25, No. 2 (May 1970), pp. 503-515; and Paul F. Smith, "Pricing Policies of Consumer Loans at Commercial Banks," JOURNAL OF FINANCE, Vol. 25, No. 2 (May 1970), pp. 517-525.

[12] See 'Bankers Trust New York Corporation' in "Law Department," FEDERAL RESERVE BULLETIN, Vol. 59, No. 9 (September 1973), p. 694.

banks in Philadelphia paid a higher interest rate on savings deposits than did commercial banks. Despite the higher nominal rate at mutual savings banks, growth of savings deposits at both types of institutions was about the same. Apparently the Court believed that if the two types of institutions were in competition for savings deposits, the discrepancy in interest rates should have led to relatively faster growth in savings deposits at mutual savings banks. Since that was not the case, the Court concluded that customers must simply prefer to do business with commercial banks.

The Court can be criticized for adopting a narrow view of the elements of competition. The differential between rates paid on savings accounts offered by banks and thrift institutions represents the convenience value of being able to transact a wide variety of financial services at one location. Congress created the power of regulatory agencies to establish rate differentials so that more limited-service thrift institutions would have a means to compete with the convenience of full-service banks.

Further, if banks did enjoy a "settled consumer preference" as the Court asserted, then commercial banks should have at least maintained their market share of total savings deposits despite historical shifts in rate differentials that may have occurred. But that is not what happened. During the period from the end of World War II to the time of the trial, commercial banks' share of financial resources at all deposit institutions declined from 86 percent to 65 percent. During this time, savings deposits at commercial banks grew at an annual rate of 7.5 percent, mutual savings bank deposits grew at a 6 percent annual rate, savings and loan shares grew at a 14 percent annual rate, and credit union shares grew at a 17 percent annual rate. It is worth noting that the Court's comparison was based on mutual savings banks, which had the lowest growth rate of the various types of nonbank intermediaries.

Since the trial, the steadily increasing powers being granted to thrift institutions (such as remote electronic teller devices, third-party payment services, and broader lending authority) are increasing the attractiveness of nonbanks and seriously diminishing whatever "one-stop" advantages commercial banks may have had. Moreover, given its responsibilities under the Bank Holding Company Act, the Board of Governors has made "the determination, compelled by reality, that the operation of a savings and loan association is 'closely related to banking or managing or controlling banks.'"[13]

To summarize, the evidence of the market place was clear enough, had the Court looked sufficiently beyond the testimony of the one Philadelphia banker it cited; with regard to savings accounts, consumers showed no "settled preference" for commercial banks. What did settle, over a period of two decades prior to the case, was commercial banking's share of consumer savings deposits.

Facilitating Bank Regulation

The finding that commercial banking is the relevant line of commerce for Clayton Act purposes has profoundly affected bank merger regulation. Bank regulatory agencies, in order to make legally sustainable decisions, have limited their consideration to competition among commercial banks only. Regulatory proceedings generally ignore competitive possibilities originating from other types of institutions.

Within this procedural constraint it is interesting to note that commercial banks are generally considered as a homogeneous group producing essentially the same relative amounts of the various financial services. But banks *do* specialize. Unfortunately, under current regulatory procedures, large money center banks primarily serving major corporate accounts and providing correspondent banking services have to be considered in competition with small suburban banks primarily serving households and small businesses.

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[13]See 'American Fletcher Corporation' in "Law Department," FEDERAL RESERVE BULLETIN, Vol. 60, No. 12 (December 1974), p. 868.

One consequent difficulty confronting regulatory agencies as a result of the Court's finding is the matter of measuring concentration. If commercial banking is a distinct line of commerce, then some single measure of concentration should summarize the information needed by the regulator about the degree of concentration in a market. However, the Court itself enumerated a long list of services provided by banks, including unsecured loans, mortgage loans, various installment loans, credit card plans, demand deposits, savings deposits, trust services, correspondent services, and others. None of these services singly and to the exclusion of the others can realistically measure the impact of a merger on market concentration.

The dilemma is that a nonbank financial institution can be found which provides any one (but not all) of these services and that no single service is an accurate portrayal of all commercial banks. Had the Court decided that banks are engaged in several lines of commerce, this dilemma could have been avoided; that is, the Court probably would have determined that commercial banks are relatively important in the provision of some services but that nonbanks are relatively important in others. Such a determination may have affected the decision regarding the Philadelphia merger itself, but quite possibly the Court may have been able to satisfy itself that the proposed merger would have tended to substantially lessen competition in one or more of these service lines.

Another problem regulatory agencies face because of the Court's finding is determining the proper geographic area for appraising the competitive effects of a proposed merger. For example, large corporations can seek commercial credit nationwide, while households seeking personal loans are probably limited to a local area. Defining commercial banking as the relevant line of commerce implies a single geographic area that may not be appropriate for all services. If lines of commerce are defined according to different financial services, a realistic geographic area can be attached to each line.

More importantly, defining several lines of commerce would have provided standards capable of being easily applied to a changing competitive environment. Had the line of commerce question been resolved according to goods and services instead of according to institutions, the standard could have prevailed as different types of firms became more or less significant. As it is, the existing line of commerce criterion is not consistent with current realities and is in need of change. Bank regulatory agencies and the Antitrust Division of the Justice Department should examine competition where it really exists, and the judicial system should support this effort.

Measuring Banking Concentration In Minnesota

David S. Dahl, Samuel H. Gane, and
Richard W. Stolz

According to traditional measures, Minnesota has a highly concentrated commercial banking industry; that is, a few banking firms control a large share of deposits or assets held by all commercial banks in the state. Professor Paul Jessup found this banking structure "exceptional" when compared to those of other states with similar total deposit size, and he has suggested several ways to change it, such as allowing out-of-state firms to own banks here.[1] The Board of Governors of the Federal Reserve System has been cautious in approving holding company acquisitions in Minnesota by any of the dominant firms.[2] In 1976 when former Governor Anderson vetoed a bill to let commercial banks install remote electronic facilities, he cited the high concentration of banking resources in two Minneapolis-based holding companies, First Bank System, Inc., and Northwest Bancorporation.[3]

These statements, studies, and policy actions are based on the view that the supply side of banking markets consists of only commercial banks and does not include other firms offering similar services. Although an extensive legal, regulatory, and judicial heritage seems to accept this idea,[4] some believe it has no economic justification (see preceding article). If so, policy actions based on concentration measures that consider commercial banking a separate and distinct industry may be inappropriate.

The objective of this study is to reevaluate the conclusion that Minnesota has a highly concentrated, "exceptional" banking structure. Banking concentration measures are broadened to include nonbank suppliers of financial services. This focuses attention on particular financial services rather than institutions. The five services specifically analyzed here are total deposits; deposits of individuals, partnerships, and corporations (IPC deposits) in accounts less than $100,000; time and savings deposits in accounts less than $100,000; mortgage loans; and commercial loans.[5] Based on an examination of the resulting measures, some speculation is made on the likely effects of a liberalization in Minnesota's branch banking laws.

Analyzing the Concentration Profiles

To reassess Minnesota's banking structure, concentration profiles for the five financial services are constructed for Minnesota and for comparison groups of states. Each profile shows the cumulative percentage shares of a given service held by the five largest firms. Three

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[1] See Paul F. Jessup, "Minnesota's Exceptional Banking Structure: Research and Policy Perspectives," Research Report, Minneapolis, Minnesota: Federal Reserve Bank of Minneapolis, March 1975.

[2] See "Law Department" section of each of the following FEDERAL RESERVE BULLETINs: Vol. 54 (February 1968), p. 222; Vol. 55 (January 1969), p. 62; and Vol. 59 (March 1973), p. 194.

[3] Steven Dornfeld, "Governor Vetoes Banking Measure," MINNEAPOLIS TRIBUNE, April 21, 1976, p. 4A.

[4] Federal laws which treat commercial banks and other financial intermediaries separately include the Bank Merger Act, the Bank Holding Company Act, and the Savings and Loan Holding Company Act. The controlling court decision defining commercial banking as a distinct line of commerce is 'U.S. v. Philadelphia National Bank,' 374 U.S. 321 (1963); see also 'U.S. v. Phillipsburg National Bank,' 399 U.S. 350 (1970), and 'U.S. v. Connecticut National Bank,' 418 U.S. 656 (1974).

[5] See appendix for sources.

different versions of the concentration profiles are calculated for each service.

The first version covers commercial banks only. As an example, the profile plotted in Figure 1 shows cumulatively the percentage of all commercial bank deposits in Minnesota held by the state's five largest commercial banks. Standing alone, this profile reveals considerable difference in size between the top two banking firms and the other three. The sharp bend at the two-bank level and the low slope thereafter shows that the two largest banks cumulatively hold about half the deposits in the state; the third, fourth, and fifth largest banks add relatively little.

To determine whether Minnesota is atypical, we must compare it to other states. Figure 2 provides one benchmark: namely, an average profile for a sample of "unit banking" states that prohibit branch banking as does Minnesota. The higher the profile the more concentrated the industry; so as Figure 2 clearly shows, banking is more concentrated in Minnesota than in the sample of unit banking states.

Concentration measures based solely on commercial banks have traditionally been used in academic, regulatory, and policy analyses. Therefore, this first version of the concentration profile represents the usual way of assessing concentration that the present analysis seeks to broaden.

The second version of the concentration profiles reflects the wider view that nonbank financial institutions are competitive suppliers of many banking services. Each of these profiles shows the five largest commercial banks' cumulative shares of the service offered by all financial institutions: commercial banks, savings and loan associations, mutual savings banks, and credit unions.

The solid line in Figure 3 plots such a profile for banks in Minnesota. Not surprisingly, the second version shows less concentration in the five largest banking firms than the first version did, because nonbank firms increase the total

Figure 1

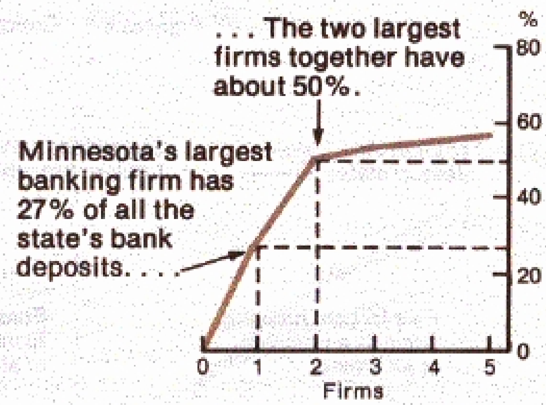


Figure 2

Bank deposits are more concentrated in Minnesota than in the sample unit banking states.

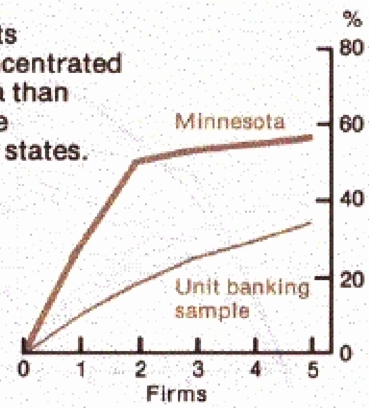
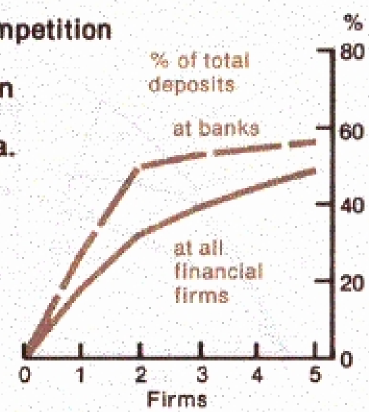


Figure 3

Nonbank competition reduces the concentration of deposits in Minnesota.



Figures 4-8 Concentration of Financial Services

Minnesota ━━ Statewide branching states ━━ Unit banking states ━━
Jessup states •—• Limited branching states - - - -

A. Five largest banking firms as a percent of all banks

B. Five largest banking firms as a percent of all financial firms

C. Five largest financial firms as a percent of all financial firms

Figure 4 Total Deposits

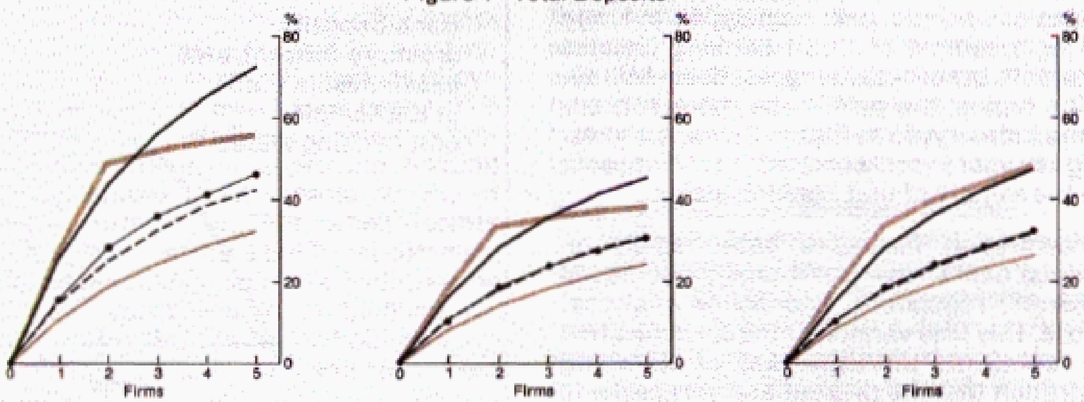


Figure 5 IPC Deposits Less Than $100,000

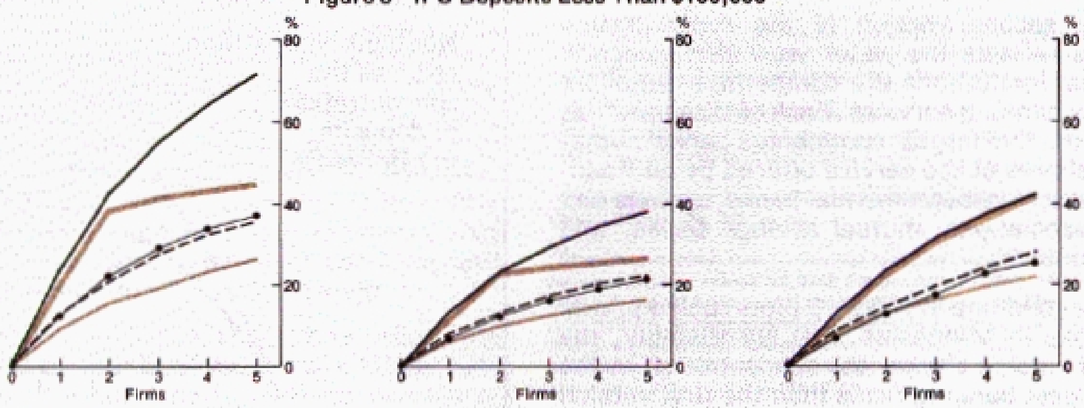


Figure 6 Time & Savings Deposits Less Than $100,000

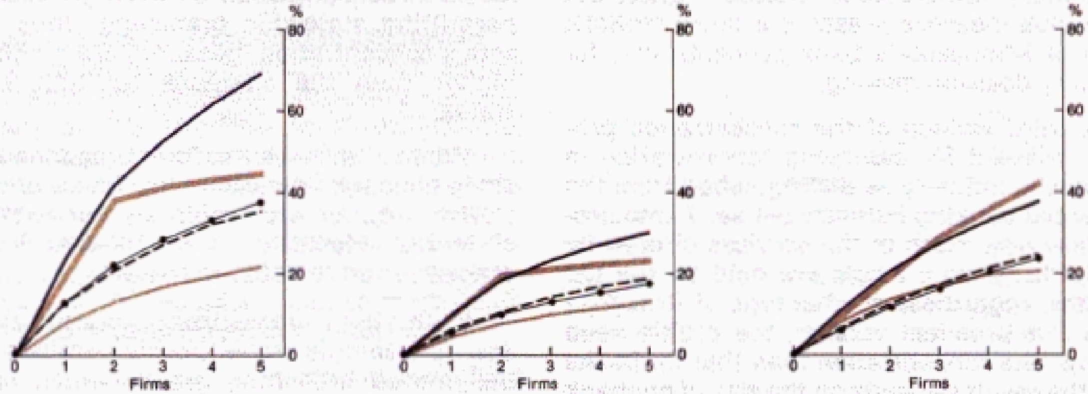


Figure 7 Mortgage Loans

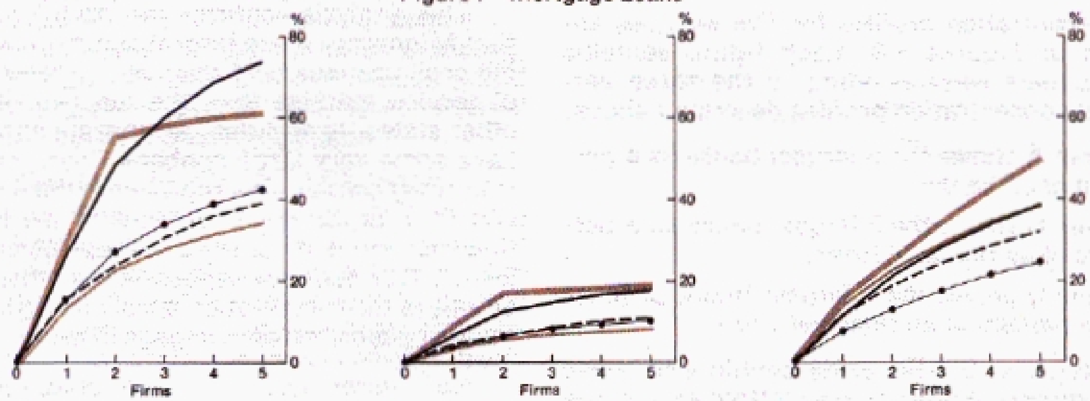
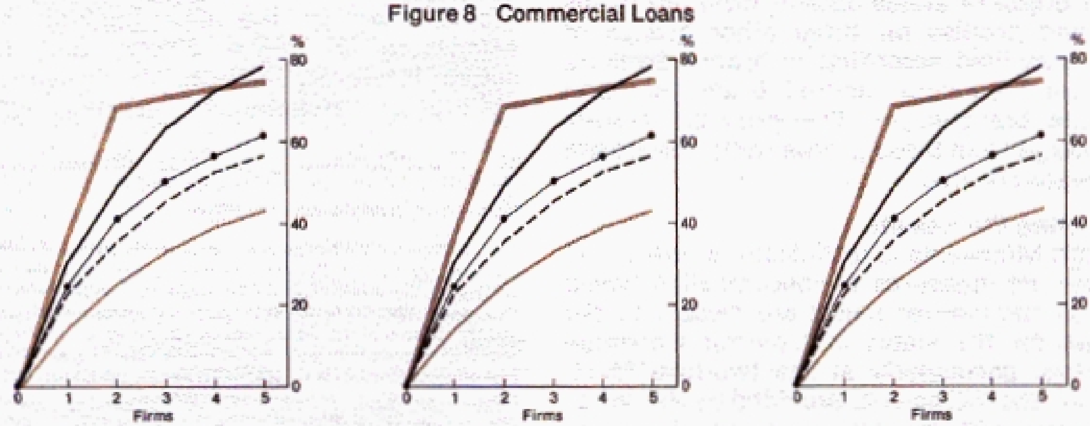


Figure 8 Commercial Loans



Note: All data as of June 1975. For definitions and sources, see appendix.

amount of the service being measured. Whether the relative improvement would be reassuring to regulatory authorities is another matter, but we feel this measure presents a more realistic picture of Minnesota's bank concentration for regulatory decision making.

The third version of the concentration profiles is relevant for assessing concentration in the financial industry as distinguished from the commercial banking industry per se. These profiles show how much of the services offered by financial firms as a whole are held by the top five firms, regardless of what type of firm they are. In this broadest version, the profile need not show less concentration than that for banks alone; the result depends on the size of nonbank financial firms that may enter the profile.

Concentration profiles for five services are plotted in Figures 4-8. Each figure contains three panels corresponding to the three versions of concentration profiles described above.

- Panel A shows the 5 largest banks as a percent of all banks.
- Panel B shows the 5 largest banks as a percent of all financial firms.
- Panel C shows the 5 largest financial firms as a percent of all financial firms.

In each panel a Minnesota profile and these four comparison profiles are plotted: an average for the group of states Jessup included in his study and profiles for three other groups of states, classified according to branch banking status (unit banking, limited branching, and statewide branching).[6] The principal results that emerge from these profile comparisons are summarized below.

Interpreting the Results

Although Minnesota is technically a unit banking state, its measures of concentration based solely on commercial banks are closest to the averages for the states that permit statewide branching, particularly at the two-firm level. However, the increments provided by the third, fourth, and fifth largest firms are about the same size in Minnesota as in the unit banking sample. States characterized by limited branching or unit banking exhibit significantly lower levels of concentration on average than states permitting statewide branching; thus Minnesota's concentration measures are significantly higher than the averages for unit banking states.

When the measures are broadened to include nonbank financial firms, levels of concentration drop for Minnesota and for each group of states. However, their relative levels of concentration remain the same.

With both measures, concentration in Jessup's sample states closely parallels that in the limited branching group, which is lower than in Minnesota.[7]

This analysis confirms the traditional view that Minnesota's two largest commercial banking organizations hold relatively greater shares of service markets than the top two banks in other states. In addition, Minnesota appears to have some very large nonbank financial firms, since they consistently replace the third, fourth, and fifth largest banking firms in the broader financial industry profiles (except commercial loans). This does not happen in the other states except in thrift institution specialties (time and savings deposits and mortgage loans).

No matter how it's computed, banking concentration in Minnesota is significantly higher than in the unit banking sample; Minnesota *is* unique among unit banking states. However, Minnesota's concentration is not high or "exceptional" nationally, since it is

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[6]See appendix for states in each sample.

[7]The Jessup sample had a concentration profile like the limited branching state sample's for all five services investigated, both when considering commercial banks alone and when including nonbank financial institutions. This is not surprising in view of the pattern of concentration across samples and the makeup of the Jessup sample. Of the three samples constructed according to branching laws, the statewide branching sample showed the highest concentration, the unit banking sample the lowest, and the limited branching sample concentration fell in between, or "averaged," the other two. In a somewhat different sense, the Jessup sample "averaged" the concentration of all three categories by including states with all three types of legislatively established banking structures.

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very similar to the average for the statewide branching group and lower than in some of those states.

A Conjecture About Branching in Minnesota

Because its levels of concentration are so like the averages for statewide branching states—especially at the two-firm level—Minnesota, with two large multibank holding companies, may have already experienced *de facto* statewide branching. In Minnesota the top two firms have banking affiliates throughout the state. Perhaps expansion via holding company subsidiaries was Minnesota's response to whatever caused branch bank expansion elsewhere.

If so, then permitting statewide branching in Minnesota might not be expected to significantly increase concentration at the two-firm level. Each of the large holding companies might consolidate its subsidiaries as branches, but any large increases in concentration would raise Minnesota's profile to a level unusual even for statewide branching states.

For the third, fourth, and fifth largest commercial banking firms, however, Minnesota's concentration increments are more typical of unit banking states. Since concentration increments are much higher in statewide branching states, liberalizing Minnesota's branching law might result in branching among smaller banking organizations.

This is conjectural, of course, since other factors will influence bank expansion. Federal regulatory barriers or conservative investors, for example, would constrain expansion through merger or acquisition by either of the large multibank holding companies. At the same time, *de novo* branches or limited service electronic facilities would allow expansion without severe regulatory or capital constraints.

More research is needed before the likely effects of liberalizing Minnesota's branch banking laws can be confidently assessed. Based on this study, though, permitting branching would not be expected to significantly increase concentration in the two largest commercial banking firms.

Appendix

Sample Definitions

These are the states in the four groups used in this study:

Statewide[1] Branching	Limited[1] Branching	Unit[1] Banking	Jessup[2]
Idaho	Georgia	Kansas	Georgia
Maine	Kentucky	Missouri	Indiana
North Carolina	Michigan	Montana	Massachusetts
South Carolina	New Mexico	Nebraska	Minnesota
Utah	Tennessee	Oklahoma	Missouri
Washington	Wisconsin	Texas	North Carolina
			Tennessee
			Virginia
			Wisconsin

Data Sources

The main sources for the data used in this study are:

Commercial and mutual savings banks
FRB Minneapolis and FR Board of Governors
REPORT OF CONDITION and SUMMARY OF DEPOSITS, June 1975

Savings and loans
Federal Home Loan Bank Board
STATEMENT OF CONDITION—OPERATION, June 1975

Credit unions
Credit Union National Association, Inc.
ANNUAL REPORT, 1974 and 1975[3]

For more specific locations, contact the authors.

[1]From classification of states according to prevalent type of branching structure in A PROFILE OF STATE-CHARTERED BANKING, December 1975, Conference of State Bank Supervisors, 1015 18th Street, N.W., Washington, D.C. 20036. For this analysis, six states were selected from each of the three groups.

[2]Paul F. Jessup, "Minnesota's Exceptional Banking Structure: Research and Policy Perspectives," Research Report, Minneapolis, Minnesota: Federal Reserve Bank of Minneapolis, March 1975.

[3]Credit union data were only available for December 31 of each year; so to approximate June 1975, these data for 1974 and 1975 were added and divided by two.

Competitive Aspects of EFTS

A Summary of a Study by Donald P. Henczel*

Electronic funds transfer systems (EFTS) are likely to greatly change the future financial environment. The scope of EFTS development is presently limited by laws and regulations, but whatever evolves will almost certainly alter the public's perception of financial institutions and the services they provide. If these changed perceptions cause consumers to shift their assets from one type of institution to another, the competitive relationships between the various types of financial institutions—their shares of deposits—will also change.

The study summarized here estimates how the relative shares of consumer savings deposits at commercial banks and savings and loan associations (S&Ls) in Minnesota would change under two alternative public policies governing EFTS developments. The study considers only the placement of remote electronic terminals by these two types of institutions. "Terminals" refers to detached automated tellers, which may process deposits and withdrawals but cannot open new accounts.

Methodology

Minnesota's state and national commercial banks and state-chartered S&Ls are currently prohibited from establishing remote electronic terminals, while federally chartered S&Ls are not. This study projects what would happen to the consumer savings market under alternative public policies: if state laws were changed just slightly so that all S&Ls (but still *only* S&Ls) could develop remote terminals or changed quite a bit so that both commercial banks and S&Ls could develop them.

In estimating the impact of EFTS developments, two main simplifying assumptions are made: First, the share of consumer savings deposits at each type of financial institution depends only on its share of offices. Second, in measuring the share of the market captured, one remote electronic terminal is equivalent to some fraction of a traditional office.

Thus, under each public policy, financial institutions are projected to develop a certain number of remote terminals. This alters their relative shares of offices, which in turn affects their relative shares of consumer deposits.

Various assumptions about the effect of EFTS on Minnesota's unit banking environment and about the market strategies financial institutions use to place remote terminals are also considered under each policy. A range of possible outcomes is therefore reported for each alternative.

Results and Conclusions

As of year-end 1974, S&Ls held 34 percent of consumer savings deposits in Minnesota, commercial banks 57 percent, and credit unions and the state's one mutual savings bank the remaining 9 percent. Despite S&Ls' authority to establish branches and their growing share of the total number of financial offices, their share of this market declined at a rate of 0.32 percentage points per year from 1971 to 1974.

*"Competitive Aspects of EFTS," summarized here by Samuel H. Gane, is available from the Research Department of this Bank.

Laws affecting the placement of remote terminals are likely to change this trend significantly, according to the study. If only S&Ls are permitted to establish remote electronic terminals, their share of the market for Minnesota's consumer deposits will increase substantially, between 1.7 and 4.8 percentage points. But if both banks and S&Ls can establish terminals, S&Ls' share will stay the same or shrink as much as 3.7 percentage points; in this case, EFTS is projected to give banks a competitive advantage over S&Ls. This effect will be especially strong if banks place remote terminals like branches thus removing S&Ls' current branching advantage.

A Note of Caution

This study estimates possible outcomes; it does not forecast the type of public policy environment that will actually be adopted nor evaluate which outcome is better. The study measures how responsive relative market shares are to changes in EFTS-enabling legislation and indicates they are fairly responsive. These results, however, are indicative, not definitive. Further study could alter the picture and would be necessary to make informed EFTS policy decisions.

The Board of Governors has published a leaflet entitled "Fair Credit Billing," a brief but relatively complete statement of customer rights under the Fair Credit Billing Act. Supplies of the leaflet have been made available to all banks for distribution to their customers. Copies are also available from

Office of Public Information
Federal Reserve Bank of Minneapolis
250 Marquette Avenue
Minneapolis, Minnesota 55480