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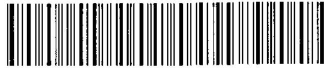
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THRIFT COMPETITION AND ITS IMPACT ON FINANCIAL INSTITUTION MERGERS AND ACQUISITIONS IN THE RICHMOND, VIRGINIA RMA

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Date: April 8, 1988
Class: EMBA 590
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Survey and Review of Literature

Commercial banking has been subject to antitrust review for only a few decades. In 1948, the Transamerica Corporation was charged by the Board of Governors of the Federal Reserve System with a violation of Section 7 of the Clayton Act when it acquired controlling interest in several independent banks in California.(1) At the time of the acquisitions, the banks in question were in direct competition with one or more of the banks already controlled by Transamerica Corporation. Moreover, Transamerica Corporation held a major interest in Bank of America. This unique case ignited a fear of probable banking concentration and potential banking monopoly.

The debate about concentrations in banking led to a Congressional inquiry and a subsequent staff report entitled "Bank Mergers and Concentration of Banking Facilities." The report stated that the reduction in the number of banks nationwide had lessened competition in many banking communities and recommended remedial legislation to ensure that government banking authorities would study the effect of such merger and acquisitions prior to approving any sort of bank merger of consolidation.(2)

Although the Congressional report did not lead to any direct legislation at that time, it did provide the framework

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(1) David A. Alhadeff, Monopoly and Competition in Banking, Berkeley: University of California Press, 1954, p. 2.

(2) Ibid

for the Bank Merger Act of 1960. This Act provided for direct administrative control of bank mergers and established a procedure for a review of proposed bank merger transactions by the appropriate federal regulatory agency. In a subsequent action, the Bank Merger Act of 1966 clarified the roles of the federal regulatory agencies in potential bank mergers. This Act also set forth the minimum time frame, following approval of a merger transaction, before consummation of the merger may take place. This period of time was established in order to allow the Department of Justice an opportunity to contest merger transactions. Prior to passage of the Bank Merger Act of 1960, banking was generally held to be separate from "commerce" and therefore not subject to antitrust laws.

The Supreme Court's 1963 decision involving the Philadelphia National Bank, however, removed any doubts as to the applicability of antitrust to banking. The Court applied the narrow competitive criterion of Section 7 of the Clayton Act (1914) rather than the broader criteria of the Bank Merger Act. The Supreme Court found commercial banks to offer a unique "cluster" of products that comprise a separate line of commerce. This important antitrust law prohibits mergers when "in any line of commerce in any section of the country the effect of such acquisition may be to substantially lessen competition".[3] In affirming Section 7 of the Clayton Act to bank mergers, the Supreme Court stated "...that the cluster of products (various

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(3) The Clayton Act, 15 U.S.C. 18 (1914).

kinds of credit) and services (such as checking account and trust administration) denoted by the term "commercial banking,"...composes a distinct line of commerce..."[4] The Supreme Court reaffirmed its stance in the Philadelphia National case in 1970 with its case involving Phillipsburg National Bank.

Since the 1960s, the task of reviewing the antitrust effects of proposed commercial bank mergers and bank holding company acquisitions has rested primarily with the three federal banking agencies. The Federal Reserve System has jurisdiction over state member banks and all acquisitions involving bank holding companies; the Federal Deposit Insurance Corporation (FDIC) over state nonmember banks; and the Office of the Comptroller of the Currency (OCC) over national banks. The Department of Justice also plays a roll in banking antitrust in that it may, within 30 days of agency approval, bring suit to prevent any merger.

Prior to the 1980s, it was common for the banking agencies to reject proposed bank mergers and bank holding company acquisitions for antitrust reasons. Since 1980, legislative changes, judicial rulings, and agency decisions have combined to create a regulatory climate that has produced far fewer rejections of both horizontal and market extension mergers.

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(4) "Mergers, Thrift Power Pose Issue of Public Policy on Competition," The American Banker, August 24, 1977, p. 9.

On the legislative side, the Depository Institutions Deregulation and Monetary Control Act of 1980 and the Garn-St. Germain Act of 1982 substantially increased the "banking" powers of thrift institutions and further weakened the concept of commercial banking as a separate line of commerce. In addition, the Department of Justice in 1982 revised its merger guidelines that had been in usage since 1968.[5]

On the judicial side, the U.S. Fifth Circuit Court of Appeals in 1981 had two important decisions.[6] First, the Court overturned the Federal Reserve's rejection of a market extension acquisition, and secondly, the Court ruled that no banking acquisition or merger could be denied for competitive reasons unless the merger or acquisition constituted an antitrust violation. This second position essentially prohibited the federal banking agencies from having antitrust standards more strict than those of the Department of Justice.

Subsequent to the U.S. Fifth Circuit Court of Appeals decisions, the federal banking agencies published their guidelines for evaluating potential market extension mergers. In 1982, the Federal Reserve Board publicly listed four specific

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(5) Margaret E. Guerin-Calvert, "The 1982 Department of Justice Merger Guidelines: Applications to Banking Mergers." Issues in Bank Regulation, Winter, 1983, p. 18.

(6) Board of Governors of the Federal Reserve Systme, "Antitrust Laws, Justice Department Guidelines, and the Limits of Concentration in Local Banking Markets," Federal Reserve Bulletin, June, 1984, p. 2.

criteria that would have to be met before a market extension merger could be rejected on antitrust grounds: (1) the market of the firm to be acquired is highly concentrated (i.e., it is operating noncompetitively), (2) there are relatively few probable future entrants into the market, (3) the acquiring firm is a likely entrant into the target market, and (4) alternative entry by the acquiring firm would significantly encourage competition in the market structure.(7)

The combined effect of the aforementioned legislative changes and judicial changes, coupled with the changes in the Justice Department's merger guidelines and public pronouncement of the banking agencies standards, has not resulted in a denial of a market extension merger since 1980.(8) The catalyst in the approval rate was twofold. First, the Department of Justice published its methodology for defining product and geographic markets. And secondly, the Department of Justice elected to use the Herfindahl-Hirschman Index ("HHI") rather than the four-firm concentration ratio as a measure of market concentration.(9) Another substantive factor that has greatly facilitated bank

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(7) Board of Governors of the Federal Reserve System, 12 C.F.R. Chapter 11, "Statement of Policy on Bank Acquisitions," February 26, 1982, pp. 1-3.

(8) Anthony W. Cyrnak, "Banking Antitrust in Transition," Federal Reserve Bank of San Francisco FRBSF Weekly Letter, December 26, 1986, p. 2.

(9) Stephen A. Rhoades, "Merger Guidelines: Their Purpose, Construction, and Implementation," Bankers Magazine, January-February, 1983, p. 29.

mergers has been the use of branch and bank divestitures to eliminate or reduce the negative effects of certain horizontal mergers.

The "HHI" was developed in the mid-1940s by Orris C. Herfindahl and Albert O. Hirschman; however, it was not widely used as a measure of concentration in antitrust studies until the 1960s. In 1964, George Stigler popularized the index in his article entitled "A Theory of Oligopoly".(10) In the 1970s, as merger and acquisition transactions increased, more emphasis was placed on competition and the "HHI" gained rapid acceptance. And finally in 1982, the Justice Department's acceptance of the index fueled near total usage in determining market concentrations of potential mergers and acquisitions.

Prior to 1982, the concept of commercial banking being a separate line of commerce was quite pure and narrow. In the purest sense, "commercial banking" implied financial banking institutions. These entities did not include savings and loans, credit unions, investment banks, or trust companies. However, in 1975 as commercial banks sought to shed their restrictive branch banking statutes, as well as restrictions on what financial services they could offer and interest rates they could pay on deposits, they realized that many inroads had been cut into "their" traditional markets.(11) Savings and loan

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(10) Donald I. Baker and William Blumenthal, "Demystifying the Herfindahl-Hirschman Index," <u>Mergers and Acquisitions</u>, Summer, 1982, p. 43.

(11) "Benefits of Competition Cited as Main Argument in Favor of Branch Banking," <u>The American Banker</u>, Editorial, September 27, 1978, p. 7.

associations for example, which were not bound by antibranching statutes, were beginning to offer transaction services that so closely resembled those offered by commercial banks that consumers could find little meaningful distinction between the two financial institutions.

In 1977, several articles were written by the Federal Reserve Bank of Boston which denoted the increasing powers of thrift institutions, particularly in New England. New England thrifts were offering negotiable orders of withdrawal accounts (NOW accounts). Moreover, state-chartered thrift institutions were offering checking accounts, credit cards, and making personal loans in various New England states.(12) This inroad by the thrifts started to "muddy the waters" to the continuing validity of the Supreme Court ruling that commercial banking constitutes a separate line of commerce.

The debate as to whether thrifts should be considered direct competitors of commercial banks continued until the 1980s. Then in 1980 and 1982, with the passage of the Depository Institutions Deregulation and Monetary Control Act and the Garn-St. Germain Act, respectively, the treatment of thrifts as direct competitors started to grow.(13) These Acts gave thrift institutions, nationwide, the ability to make

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(12) "Mergers, Thrift Power Pose Issue of Public Policy on Competition," The American Banker, August 24, 1977, p. 9.

(13) Donald L. Welker, "Thrift Competition: Does It Matter?," Federal Reserve Bank of Richmond, Economic Review, January-February, 1986, p. 3.

commercial and industrial loans and to offer transaction accounts (such as NOW accounts). These two activities previously had distinguished the banking industry from the thrift industry.

More recent studies have suggested that although thrifts have garnered these additional powers, they have not fully exploited their potential marketability. Thrifts are being viewed upon as direct and viable competitors of commercial banks, despite the fact they have not fully capitalized on these opportunities. The primary regulators (Federal Reserve, FDIC, and OCC) subsequent to 1982 issued merger standards that considered the competitiveness of thrifts. These regulators gave various weights to the roles thrifts played in market shares. The Federal Reserve Bank, for example, currently considers only 50 percent of a thrifts' deposit base for market competition; whereas, the Office of the Comptroller of the Currency (OCC) gives weight to 100 percent of a thrifts' deposit base. The Department of Justice, on the other hand, gives consideration to only 20 percent of a thrift's commercial deposits and 100 percent to its consumer deposits. Although the weights assigned by the various banking regulatory agencies differ, in the final analysis, their antitrust standards cannot be more restrictive than those of the Department of Justice.

In 1985, the Department of Justice indicated that it is not likely to challenge bank mergers and acquisitions unless the Herfindahl-Hirschman Index after the transaction is 1800 points or higher and the combination of the companies raises the Index

by at least 200 points.[14] A few recent bank mergers may even suggest that the Department of Justice will give greater weight to thrift institutions if the Herfindahl-Hirschman Index is beyond these established benchmarks and the overall market concentration impact is considered minimal.

Objectives of the Study

This study seeks to underscore the unique and often difficult task of defining, delineating, and analyzing bank competition and relevant banking markets as they relate to the merger and acquisition activity of financial institutions. Federal regulatory agency personnel (i.e. the banking agencies and the Department of Justice), bankers, lawyers, and judges have grappled with this task since banking was first denoted as a separate line of commerce. This study emphasizes the fact that thrift institutions provide far greater competition for commercial banks than currently recognized, and thus challenges the concept that commercial banking is a "separate line of commerce". This will be shown through an examination of the impact of thrifts in analyzing competition of the commercial banking industry.

Banking organizations often employ full time staffs and/or outside consulting firms to prepare and analyze market data in an attempt to gain regulatory approval for a proposed merger

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(14) Frederick T. Furlong, "Assessing Bank Antritrust Standards," Federal Reserve Bank of San Francisco FRBSF Weekly Letter, May 15, 1987, p. 1.

transaction. Since the publication of the Department of Justice Guidelines in 1982, the evaluation of competition (or lack thereof) between commercial banking institutions has been fairly standard to quantify. However, with the rapid degree of consolidation in the thrift industry, the expansion of the commercial banking market, and the growth of the non-bank financial services industry, the competition created by thrift institutions for "commercial banking" relationships has clouded the once "simple" calculation. It is from this perspective that this study was written so that interested parties may gain insight into the meaning of competition and the importance of proper market delineation and identification.

Scope and Method of Presentation

While the majority of bank merger cases acted upon by federal regulatory agencies are approved and the mergers ultimately consummated, a small number of such cases are found to be anticompetitive and violate the intent of the Bank Merger Act or Section 7 of the Clayton Act. The probability of gaining approval for a proposed merger was increased by the development and release of the Department of Justice guidelines on mergers and acquisitions. Since public attention has focused upon the traditional connotation of banking as a "separate line of commerce", several cases will be reviewed to display the potential impact of thrift institutions in evaluating potential mergers and acquisitions.

This study is technical in nature and requires a basic understanding of commercial banking and the financial industry. In addition, an understanding of basic industry terms, as they relate to bank merger analysis, is required. Attention is directed to the Glossary of Bank Merger Terms included as an appendix to this study.

It is not the intent of this paper to review or analyze in depth other considerations in a proposed bank merger transaction such as accounting treatment, profit motive, financial and managerial resources of the institutions involved, the resultant bank's future prospects, or other statutory banking factors. Considerations relating to the convenience and needs of the community to be served will be covered only to the extent that its inclusion is involved in the consideration of the relevant banking market and competition in general.

This study will be limited to the view of the subject matter within the federal regulatory framework and will not take into account the legislation imposed by the various state banking agencies.

Defining A Market Area

Defining an institution's market area has recently become more important. In the arena of mergers and acquisitions, both the regulatory agencies and the Department of Justice seek ways to "clearly" identify and prevent potentially unfair competition. The controversy caused by mergers usually centers on a concern that the combination of two or more competing

entities will result in higher prices and reduced services in a given market. Therefore, laws focus upon the impact of prices and output as the result of a banking merger.

"To enforce these laws with respect to existing competition, the regulatory agencies and the courts had to make two fundamental decisions. First, they had to determine whether banks seeking to combine actually compete. Second, they had to determine whether allowing the proposed merger or acquisition would significantly lessen competition in the market or markets where they compete."(15)

The determination as to whether two or more institutions actually compete has been as much of an art as a science. The principal barometer of potential competition has been the institution's deposit base. Although the deposit base is subject to manipulation,(16) it is a benchmark that is used by financial institutions in determining the required level of deposit insurance and the required level of reserves held with the Federal Reserve Bank. Moreover, the deposits are reported quarterly to the various regulatory agencies via "Call Reports". The validity of the deposit levels are usually tested and verified by representatives of the primary regulatory agencies.

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(15) David D. Whitehead, "Relevant Geographic Banking Markets: How Should They Be Defined," Federal Reserve Bank of Atlanta, Economic Review, January-February, 1980, p. 20.

(16) Deposit manipulation, for example, may be caused by the purchase and sale of brokered deposits or by the purchase of "hot money" through the offering of above market rates in specific geographic areas.

The basis of which deposits to use and over what geographic banking area has evolved through several interpretations. Until 1967, "the primary service area of a bank was defined as the area in which at least 75% of the IPC (individual, partnership, and corporation) deposits were located".[17] This definition failed to discount the large concentration of commercial deposits brought in to an area and also failed to recognize the true service area. Subsequently two years later, the definition of "the primary service area" was redefined as the area in which 90% of the demand deposit accounts were located and 75% of the dollar volume of demand deposits were located. This definition emphasized demand deposits rather than IPC deposits, since it was felt that demand deposits more accurately represent the geographic area the bank may serve. This ideology originated from the concept that demand deposits represent the working cash balances of "local" depositors. Then in 1980, the regulatory agencies defined the primary service area as "the area in which each individual bank or banking office successfully markets its services. This area was specifically defined as the smallest area contiguous to the bank's office from which it gets 80% of its accounts".[18]

Once the primary service area (or relevant geographic banking area) is defined, it is relevant for all banks located

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(17) David D. Whitehead, "Relevant Geographic Banking Markets: How Should They Be Defined," Federal Reserve Bank of Atlanta, Economic Review, January-February, 1980, p. 20.

(18) Ibid

within these boundaries. However, this definition may not hold for all times. Economic growth or decline may alter banking markets. Changes in population density, commuting patterns, and new bank entries on the perimeter of the market may change a bank's primary service area and must be taken into account. In addition, "state/federal road building activities and other projects designed to remove physical obstacles to transportation and commerce also contribute to the expansion of banking markets in some communities".(19) The Department of Justice and the regulatory agencies in an apparent attempt to standardize the relevant geographic banking area in metropolitan areas are using RMAs (Ranally Metro Area) to define the primary service area. An RMA is defined by Rand McNally as "(1) a central city or cities; (2) any adjacent continuously built-up areas; and (3) other communities...if at least 8% of the population or 20% of its labor force commutes to the central city and its adjacent built-up areas"(20) and the population density is at least 70 per square mile unless undergoing rapid development. Most areas with a total population of 40,000 or more are included.

Another factor that is taken into consideration are the products that are offered by the competing institutions within the geographic market. Theoretically, a market consists of all

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(19) Donald L. Welker, "Thrift Competition: Does It Matter?," Federal Reserve Bank of Richmond, Economic Review, January-February, 1986, p. 2.

(20) Rand McNally & Company. Commercial Atlas and Marketing Guide. Chicago: Rand McNally & Company, 1985.

the potential customers sharing a particular need or want who might be willing and able to engage in exchange to satisfy that need or want. Additionally, a market may be defined as including "those firms producing sufficiently substitutable products or services in such proximity to one another that a change in prices by one of the firms will influence the prices or output of other firms".[21]

As applied to banking, it is evident that many basic banking services can be efficiently provided in local geographic markets. These services, which can be provided by both banks and savings and loans, include both deposit and lending powers. Until 1980, and the subsequent passage of the Depository Institutions Deregulation and Monetary Control Act (DIDMCA), federally chartered savings and loans had limited ability to compete for consumer savings. With the passage of DIDMCA, both banks and thrifts had the ability to offer consumer interest-bearing transactions accounts as well as a full range of savings and time instruments. "Although state chartered thrifts have offered consumer loans for several years, federally chartered thrifts were first allowed to offer consumer loans in 1980. The Garn-St. Germain Act expanded this power by permitting thrifts to invest up to 30% of their assets in consumer loans. This act also permitted federally chartered thrifts to offer overdraft

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(21) Jim Burke, Stephen A. Rhoades, and John Wolken, "Thrift Institutions and Their New Powers," The Journal of Commercial Bank Lending, June, 1987, p. 44.

loans, including overdrafts on transaction accounts".[22]

The Garn-St. Germain Act also allowed these federally chartered thrifts to offer both commercial deposit and commercial lending services. The commercial demand deposits, however, are limited to businesses with which the thrifts have a loan relationship. The commercial lending authority allowed thrifts to make commercial loans up to 10% of their assets. Moreover, thrifts are allowed to engage up to 10% of their assets in leasing.

The Impact of Thrifts

As a result of the expanded powers granted to thrift institutions, commercial lending and transaction deposit accounts are no longer the exclusive domain of commercial banks. Consequently, the appropriate definition of the relevant market and who a bank's competitors may be are subject to question. As the thrift industry continues to consolidate, they represent a greater threat to the market base of commercial banks. In addition, the growth of the commercial paper market has reduced the demand for commercial loans, therefore, the market of quality commercial loans has decreased. Although the commercial portfolio of thrift's is limited to 10% of their total assets, several studies have shown that approximately 50% of the commercial banks have commercial portfolios that are equal to or

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(22) Ibid

less than that 10% ceiling. From another perspective, thrifts have had the "upper hand" on commercial banks for some time. In addition to the commercial "banking" powers received since 1980, thrifts have historically been able to engage in both consumer and commercial real estate activities. Commercial banks have only recently been able to engage in these activities, and even then to a limited degree.

In summary, the current definition of banking as a separate line of commerce is inadequate and should be expanded to incorporate the growing thrift industry. Powers gained from Depository Institutions Deregulation and Monetary Control Act (DIDMCA) and Garn-St. Germain Act have leveled the playing field. Although thrifts have not fully utilized their "new" powers, neither have the majority of commercial banks. In addition, the consolidation of the thrift industry is creating many thrifts that are able to compete with commercial banks "head-to-head". In 1985, for instance, thrifts represented 33 of 49 depository institutions in California with domestic deposits greater than $1 billion[23] and controlled approximately 49% of the total state deposits. The recognition of thrifts as competitors of commercial banks is important as it can measurably decrease the concentration in a banking market. The presence of thrifts in a given market makes it easier to

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(23) Frederick T. Furlong, "The Wells Fargo-Crocker Acquisition," Federal Reserve Bank of San Francisco FRBSF Weekly Letter, November 28, 1986.

meet the Department of Justice guidelines and consequently to secure approval for mergers and acquisitions involving financial institutions.

Measuring Competition in the Market

"Although the relevant geographic banking area and the relevant product market define the market area of the bank, neither identify the level of competition within the market".(24) Prior to 1982, the Department of Justice measured the degree of competition in a market by the four-firm deposit concentration ratio. The four-firm deposit concentration ratio calculates the combined share of the four largest firms in a market and expresses this concentration measure as a percentage of the market. "As an example, if the four largest banks in a market control 80% of deposits in the area, the four-firm concentration ratio will be 80%. It is evident that these four banks control a dominant share of the market, however, the ratio does not tell how many institutions may hold the remaining market share of 20%".(25)

Since 1982, and the release of the Department of Justice Merger Guidelines, the Herfindahl-Hirschman Index (HHI) has been the standard device for measuring market concentration. The use

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(24) Donald L. Welker, "Thrift Competition: Does It Matter?," Federal Reserve Bank of Richmond, Economic Review, January-February, 1986, p. 3.

(25) Ibid

of the HHI was reaffirmed in the Department of Justice's "Revised Merger Guidelines" issued in June 1984. In addition to the Department of Justice, the HHI has been adopted by other regulatory agencies including the Federal Reserve Bank and the Office of the Comptroller of the Currency (OCC).

The HHI is calculated by summing the squares of the individual market shares of all the banks included in the market. For example, a market consisting of five banks may have this allocation of market shares:

Bank #1 - 28%
Bank #2 - 26%
Bank #3 - 21%
Bank #4 - 13%
Bank #5 - 7%

The HHI for the market is 2119, or 2119 = (28 x 28) + (26 x 26) + (21 x 21) + (13 x 13) + (7 x 7). The increase in the HHI resulting from a merger is calculated by doubling the product of the market shares of the merging banks. Thus, if Bank #1 and Bank #5 were merged, the HHI would increase by 392, or 392 = 2 x 28 x 7. The new HHI is 2511, or 2511 = (35 x 35) + (26 x 26) + (21 x 21) + (13 x 13). The HHI ranges from 10,000 (100 x 100) in a pure monopolistic market to near zero in a highly competitive market.

The 1982 Department of Justice guidelines divide markets into three categories. Those markets with a post-merger HHI below 1000 are considered unconcentrated; markets with a post-merger HHI between 1000 and 1800 are considered moderately concentrated; and markets with a post-merger HHI over 1800 are considered highly concentrated. Generally the Department of

Justice challenges mergers in which the HHI rises by 100 points or more. However, for financial institutions, it has indicated it will not challenge a bank merger unless two conditions are met. "First, the post-merger HHI must be greater than 1800 and secondly, the rise in the HHI attributed to the merger must exceed 200 points".[26] The additional 100 points allowed for bank mergers by the Department of Justice is due to the many other near-bank competitors in the financial industry market which cannot be evaluated adequately from readily available data.

"The Department of Justice's Revised Merger Guidelines encompass numerous criteria for evaluating horizontal mergers, but as a starting point they have established the following general standards based upon the HHI:

a) **Post - Merger HHI Below 1000.** Markets in this region generally would be considered to be unconcentrated. Because implicit coordination among firms is likely to be difficult and because the prohibitions of Section 1 of the Sherman Act are usually an adequate response to any explicit collusion that might occur, the Department will not challenge mergers falling in this region, except in extraordinary circumstances.

b) **Post - Merger HHI Between 1000 and 1800.** Because this region extends from the point at which the competitive concerns associated with concentrations are raised to the point at which they become quite serious, generalization is particularly difficult. The Department, however, is unlikely to challenge a merger producing an increase in the HHI of less than 100 points. The Department is likely to challenge mergers in this region that produce an increase in the HHI of more than 100 points, unless the Department concludes, on the basis of the post -

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(26) Interview with A. Linwood Gill, III, Bank Supervision and Regulation Department, Federal Reserve Bank of Richmond, Richmond, Virginia.

merger HHI, the presence or absence of [nonstatistical factors discussed elsewhere in the guidelines] that the merger is not likely substantially to less competition.

c) **Post - Merger HHI Above 1800.** Markets in this region generally are considered to be highly concentrated. Additional concentration resulting from mergers is a matter of significant competitive concern. The Department is unlikely, however, to challenge mergers producing an increase in the HHI of less than 50 points. The Department is likely to challenge mergers in this region that produce an increase in the HHI of more than 50 points, unless the Department concludes on the basis of the post - merger HHI, the increase in the HHI, and the presence or absence of [nonstatistical factors discussed elsewhere in the guidelines] that the merger is not likely substantially to lessen competition. However, if the increase in the HHI exceeds 100 and the post - merger HHI substantially exceeds 1800, only in extraordinary cases will such factors establish that the merger is not likely substantially to lessen competition."(27)

The utilization of the HHI has partially identified and leveled the playing field for financial institutions considering mergers and acquisitions; however, the various regulatory agencies are divergent in their respective application of Thrift deposits in computing the HHI. For instance, the Federal Reserve Bank generally includes 50% of the total deposits held by thrifts as a component of the relevant banking market. The Federal Deposit Insurance Corporation (FDIC) considers both federally insured banks and thrifts represented by offices in a market, as well as uninsured depository institutions, and even nonbank financial companies. The Department of Justice divides the "banking market" into two segments, retail and wholesale. In the retail (or consumer) market, the Department gives weight to 100% of the thrift deposits. In the wholesale (or

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(27) Donald I. Baker and William Blumenthal, "Demystifying the Herfindahl-Hirschman Index," Mergers and Acquisitions, Summer, 1984, p. 46.

commercial) market, only 20% of the thrift deposits are considered due to the "limited" ability of thrifts to engage in commercial lending. And the Office of the Comptroller of the Currency treats thrifts institutions as full competitors of commercial banks.

As a practical matter, it makes little difference whether one uses the HHI or the four-firm deposit concentration ratio in analyzing the competition in a market. In a 1985 article by Claudio Michelini and Michael Pickford, the authors found a very high correlation between the two measures. The real question in many potential mergers and acquisitions is not how one should measure concentration in a market, but what is the relevant geographic banking market.

Prior studies on the impact of thrift competition on bank merger and acquisitions have not addressed specific cases. In January 1986, Welker discussed the magnitude of thrift deposits in the top ten banking markets in the Fifth Federal Reserve District.(28) A subsequent study in January 1988, by Baker and Severiens, addresses the impact of thrift institutions in the less urban areas of the State of Ohio.(29) Although each of these studies concluded that thrifts do make a difference, neither addressed a specific merger situation.

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(28) Donald L. Welker, "Thrift Competition: Does It Matter?," Federal Reserve Bank of Richmond, Economic Review, January-February, 1986, pp. 2-7.

(29) James C. Baker and Jacobus T. Severiens, "Concentration in Bank Markets: Do Thrifts Make a Difference?," <u>American Business Review</u>, January, 1988, pp. 1-7.

To identify the specific impact that thrift instutitions have on market competition analysis, a case-by-case approach is needed as a result of unique factors found in each financial community. This next section entitled "Merger Scenarios" will focus on the potential impact thrift institutions have on the mergers and acquisitions of financial institutions in the Richmond, Virginia RMA. These merger scenarios reflect one actual merger and one hypothetical merger. The mergers will be analyzed using commonly accepted methods of analyzing market concentration, such as the four-firm deposit concentration ratio and the Herfindahl-Hirschman Index. Each of the merger situations addresses specific market conditions in the Richmond RMA. Additionally, each case will evaluate the impact of thrift deposits utilizing the Federal Reserve Bank and Office of the Comptroller of the Currency merger guidelines.

The initial case of Virginia National Bank and First & Merchants National Bank involves the merger of two banks headquartered in different market areas of the State of Virginia. These institutions facilitated their highly publicized 1982 merger through the divestiture of branches in overlapping markets. This case reassesses the impact thrift institutions in the Richmond RMA would have had on the 1982 merger analysis had current merger standards been applicable.

The second case, which is purely hypothetical, reflects the merger of Bank of Virginia and Central Fidelity Bank, N.A. Both of these institutions are headquartered in Richmond, Virginia. This case was evaluated applying current merger standards and

attempts to assess the market concentration using 50% and 100% of the Richmond RMA thrift deposits, respectively. The significance of this potential merger is highlighted by the fact that Bank of Virginia and Central Fidelity Bank, N.A. currently hold the third and fourth largest market shares of the Richmond RMA.

Merger Scenarios

Case #1

Sovran Bank, N.A. was created through the merger transaction of First & Merchants National Bank, Richmond, Virginia and Virginia National Bank, Norfolk, Virginia. At the time of the merger, the two institutions had total deposits of $2.2 billion and $3.1 billion, respectively. Prior to the merger, the two entities had branch offices in a total of thirty-eight (38) markets throughout the State of Virginia. The proposed merger resulted in the elimination of existing competition in ten (10) of these local markets. Because some of the combined market shares were so high, the merging parties agreed to divest some of their offices in six of the markets in order to facilitate the proposed merger through the Office of the Comptroller of the Currency (OCC).

In the Richmond, Virginia RMA, the proposed merger would require the divestiture of two branches. Although the combination of these two entities (the first and third largest in the state) would appear to require a higher level of divestiture, Virginia National Bank (VNB) had only a minor

market presence in the Richmond RMA. VNB had a total of eight offices with aggregate deposits of $87,262,000, which represented 2.4% of the banking offices and 1.9% of the total deposits in the Richmond RMA. Comparatively, First & Merchants National Bank (F&M) controlled 7.7% of the banking offices and 15.4% of the total deposits. Of the combined offices represented by the two banking organizations, the two branches that were divested accounted for only 2.1% or $15,717,000 of the total deposits controlled by the institutions.

Based on deposit data as of June 30, 1980, the combined institution controlled approximately 24.2% of the total banking deposits. However, when thrift institutions were taken into consideration, the deposits represented only 17.3% of the total deposits (see Appendix B). The Herfindahl-Hirschman Index which totaled 585.64 for the combined institutions using current concentration guidelines, declined to 299.29 when 100% of thrift deposits were used in the market concentration calculation. Furthermore, when the Federal Reserve Bank standard of 50% was applied to the HHI calculation, the post-merger HHI increased only 82.55 basis points to 1,665.97.

	HHI EXCLUDING THRIFT DEPOSITS	HHI INCLUDING 100% OF THRIFT DEPOSITS	HHI INCLUDING 50% OF THRIFT DEPOSITS
Pre-merger	1,882.73	1,087.05	1,583.42
Post-merger	2,000.60	1,145.57	1,665.97
Net Increase	117.87	58.52	82.55

The decline in the Herfindahl-Hirschman Index reflects the significant market presence of the thrift institutions. As of June 30, 1980, thrift institutions in the Richmond RMA had 78 offices and total deposits of approximately $1.258 billion. These deposits represented 27.8% of the total deposits held by all financial institutions in the Richmond RMA. Moreover, 72 of these offices were in localities in which F&M held a significant market share. The six remaining offices were in Hanover County where VNB did not have a market presence and F&M had only one office with total deposits of $24,070,000, or 12.1% of the Hanover County market.

One of the branch offices divested was a VNB office in Chesterfield County. Although this office was situated across the street from a F&M office, it was also in close proximity to a majority of the thrift offices located in Chesterfield County. In Chesterfield County, as of June 30, 1980, thrifts held 36% of the total deposits. If thrifts had been taken into account as a competitor, it is doubtful that the divestiture would had been required on competitive grounds. More likely, the two institutions would have probably closed one of the offices due to the inefficiency of operating two offices so close geographically.

In summary, the addition of thrift deposits into the VNB/F&M market concentration calculation strongly suggests that the potential merger could have been consummated without the divestiture of branches in the Richmond RMA. This case also suggests that based upon Department of Justice merger

guidelines, it is unlikely that the merger would have been contested.

Case #2

The following case is based on the assumed merger of Bank of Virginia[30] and Central Fidelity Bank, N.A. in the Richmond RMA. Although the proposed merger in reality is not likely, if consummated, the potential impact of considering thrift institutions in determining market concentration is quite significant.

As of June 30, 1986, Bank of Virginia (BOVA) controlled approximately $1.4 billion, or 22.4% of the total deposits held by commercial banks in the Richmond RMA. These deposits were gathered through 30 banking offices, predominantly concentrated in Chesterfield and Henrico Counties and the City of Richmond. For the same period ending June 30, 1986, Central Fidelity Bank, N.A. (CFB), had 26 banking offices in essentially the same geographic localities with total deposits aggregating $702,561,000, or 11.3% of the commercial banking deposits in the Richmond RMA. Collectively, the two commercial banks accounted for approximately $2.1 billion, or 33.7% of the commercial bank deposits and 30.6% of the total commercial bank branch offices.

Although BOVA and CFB are the third and fourth largest financial institutions in the Richmond RMA, the significance of

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(30) Effective March 21, 1987, Bank of Virginia changed its name to Signet Bank/Virginia.

their market share is emphasized by the four-firm deposit concentration ratio. This concentration ratio accounts for the four largest commercial banking institutions in an RMA. This ratio has historically been used by the Department of Justice as a benchmark for reviewing acquisitions which may provide unreasonable market concentrations with respect to the four largest institutions. Consistent with the recognition of banking as a separate line of commerce, this ratio does not account for the deposits of thrift institutions.

Name	Percent of Market
Bank of Virginia	22.37
Central Fidelity Bank, N.A.	11.28
Sovran Bank, N.A.	22.79
United Virginia Bank	28.49
Total	84.93

The remainder of the commercial banking market (15.07%) is widely dispersed through ten other banking entities. Based on the potential market dominance created by a merger of BOVA and CFB, it is very likely that the merger would have been contested by the Department of Justice and the primary banking regulators.

The Herfindahl-Hirschman Index (HHI), calculated using only the deposits of commercial banks, supports the notion that the proposed merger would be subject to close scrutiny. As reflected in Appendix B, the HHI for commercial banks in the

Richmond RMA was 2,023.51. An HHI greater than 1,800 suggests a highly concentrated market and a merger would be challenged if the resulting consolidation also caused an increase in the HHI of 200 points or more. The proposed merger of BOVA and CFB raises the HHI to 2,529.75, excluding thrifts, and causes an increase in the HHI of 506.24 points. Based on Departent of Justice guidelines, it is highly unlikely that the merger would be consummated.

The significance of the thrift market share in the Richmond RMA (see Appendix B) is reflected by the thrift institution's control of 30.4% of the aggregate deposits of commercial banks and thrifts. This dominant market share of deposits held by thrifts would have a highly dilutive effect on the HHI if used in the merger analysis. In the proposed merger of BOVA and CFB, the use of thrift deposits decreased the pre-merger HHI to 1,083.88, which is reflective of an unconcentrated market. In the post-merger analysis, the HHI suggests the market is moderately concentrated as the index increases 246 points to 1,330.36.

	HHI EXCLUDING THRIFT DEPOSITS	HHI INCLUDING 100% OF THRIFT DEPOSITS	HHI INCLUDING 50% OF THRIFT DEPOSITS
Pre-merger	2,023.51	1,083.88	1,658.70
Post-merger	2,529.75	1,330.36	2,025.91
Net Increase	506.24	246.48	340.21

Under current Department of Justice guidelines, a potential merger is challengeable if: (1) the HHI is greater than 1,800

points, and (2) the increase in the HHI as a result of the merger is 200 points or more.

In summary, the consideration of the market share held by thrifts in this proposed merger transaction is quite significant as the pre-merger HHI is diluted by 46% when 100% of thrifts deposits are considered. Although the post-merger HHI increases by 246 points, it is improbable the merger would be challenged because the HHI remains substantially below 1,800 which the Department of Justice considers indicative of a highly concentrated market. Moreover, the high concentration of thrift offices in the dominant market areas of BOVA and CFB may possibly prevent any required divestitures to facilitate this merger transaction.

Conclusion

As indicated above, the addition of thrift institutions as direct competitors with commercial banks can have a material effect on potential mergers and acquisitions. In both Case 1 and Case 2, thrift representation significantly decreased the measured concentration in the Richmond, Virginia RMA. Moreover, the use of thrift deposits in calculating the Herfindahl-Hirschman Index suggested that there was little difference between weighting thrift deposits at either 50% or 100% in determining market concentration.

In the Richmond RMA, the difference between using either 50% or 100% of thrift deposits was generally immaterial, and may suggest that the various regulatory merger guidelines be

consolidated. The empirical evidence shows that merger results could be substantially different based on the inclusion of thrifts in market concentration analysis. The policy implication of considering thrift's deposits in the evaluation of proposed bank mergers is that it would be reasonable and efficient to reassess the consideration of commercial banking as a "separate line of commerce."

Commercial banking as a "separate line of commerce" has been recognized by regulatory authorities since the Supreme Court's 1963 decision on Philadelphia National Bank. However, with the passage of the Depository Institution Deregulation and Monetary Control Act in 1980, and the subsequent passage of the Garn-St. Germain Act in 1982, thrift institutions have gradually gained expanded powers. These expanded powers have allowed thrift institutions to engage in transaction accounts and make commercial loans. With the capacity to engage in these activities, the connotation that commercial banking is a "separate line of commerce" in merger transactions has correspondingly eroded.

This study has empirically demonstrated that thrifts should be included in any analysis of competition in the financial services industry. In Case 1, thrifts would have signicantly altered the market concentration of commercial banks, when either 50% or 100% of the thrift deposits were considered. Furthermore, the recognition of thrifts as competitors would have precluded the divestiture of branches to facilitate the merger. In Case 2, it was demonstrated that in markets where

banking is highly concentrated and trhifts are competitive in size and number, a concentration index combining banks and thrifts will be significantly lower, even if the merging banks have a dominant portion of the commercial banking market. This factor can have a material effect on potential mergers and acquisitions in highly concentrated market areas.

The inclusion of thrifts in market concentration analysis, ultimately, will more closely approximate the conditions in a perfectly competitive market. It will also ensure that the benefits, convenience, and needs of a market are more efficiently met. As this study has shown, thrift competition is a reality in the Richmond RMA and, potentially as well as in other markets. Bank regulators have begun to recognize the competitiveness of thrift institutions and their usefulness to the economy. The benefits of including thrifts in analyses of competition in the banking industry shown by this study should encourage senior management of financial institutions to assertively request that 100% of thrifts deposits be included in future regulatory evaluations of bank mergers and acquisitions.

Appendix A

	DEPOSIT DATA 1980			DEPOSIT DATA 1986			DEPOSIT GROWTH	
	# OF BRANCHES	TOTAL DEPOSITS	PERCENT OF DEPOSITS	# OF BRANCHES	TOTAL DEPOSITS	PERCENT OF DEPOSITS	DOLLAR GROWTH	PERCENT GROWTH
CHESTERFIELD COUNTY	49	270,152	100.0%	58	819,853	100.0%	549,701	203.5%
BANKS	30	171,510	63.5%	34	413,872	50.5%	242,362	141.3%
SAVINGS & LOANS	17	97,122	36.0%	21	393,297	48.0%	296,175	305.0%
CREDIT UNIONS	2	1,520	0.6%	3	12,684	1.5%	11,164	734.5%
GOOCHLAND COUNTY	5	38,316	100.0%	5	62,451	100.0%	24,135	63.0%
BANKS	5	38,316	100.0%	5	62,451	100.0%	24,135	63.0%
SAVINGS & LOANS	0	0	0.0%	0	0	0.0%	0	0.0%
CREDIT UNIONS	0	0	0.0%	0	0	0.0%	0	0.0%
HANOVER COUNTY	19	202,089	100.0%	21	450,015	100.0%	247,926	122.7%
BANKS	11	139,959	69.3%	13	287,819	64.0%	147,860	105.6%
SAVINGS & LOANS	6	61,929	30.6%	7	161,594	35.9%	99,665	160.9%
CREDIT UNIONS	2	201	0.1%	1	602	0.1%	401	199.5%
HENRICO COUNTY	79	678,819	100.0%	85	1,678,021	100.0%	999,202	147.2%
BANKS	56	433,307	63.8%	58	914,910	54.5%	481,603	111.1%
SAVINGS & LOANS	23	245,512	36.2%	26	763,075	45.5%	517,563	210.8%
CREDIT UNIONS	0	0	0.0%	1	36	0.0%	36	0.0%
CITY OF RICHMOND	174	3,330,559	100.0%	184	6,281,919	100.0%	2,951,360	88.6%
BANKS	81	2,361,210	70.9%	84	4,546,904	72.4%	2,185,694	92.6%
SAVINGS & LOANS	32	853,843	25.6%	37	1,395,270	22.2%	541,427	63.4%
CREDIT UNIONS	61	115,506	3.5%	63	339,745	5.4%	224,239	194.1%
TOTAL RICHMOND RMA	326	4,519,935	100.0%	353	9,292,259	100.0%	4,772,324	105.6%
BANKS	183	3,144,302	69.6%	194	6,225,956	67.0%	3,081,654	98.0%
SAVINGS & LOANS	78	1,258,406	27.8%	91	2,713,236	29.2%	1,454,830	115.6%
CREDIT UNIONS	65	117,227	2.6%	68	353,067	3.8%	235,840	201.2%
STATE OF VIRGINIA	2,482	28,080,318	100.0%	2,635	59,388,065	100.0%	31,307,747	111.5%
BANKS	1,617	19,184,000	68.3%	1,760	37,267,462	62.8%	18,083,462	94.3%
SAVINGS & LOANS	457	7,444,377	26.5%	503	15,664,723	26.4%	8,220,346	110.4%
CREDIT UNIONS	408	1,451,941	5.2%	372	6,455,880	10.9%	5,003,939	344.6%

TE: ALL DEPOSIT DATA IS IN THOUSANDS. IN ADDITION, THERE ARE NO MUTUAL SAVINGS BANKS IN VIRGINIA.

DATA FOR 1986

BANKS	TOTAL DEPOSITS	PERCENT OF MARKET SHARE	CURRENT HHI	HHI EXCLUDING THRIFTS & CUs
BANK OF VIRGINIA	1,392,852	15.6%	243.36	501.76
CENTRAL FIDELITY BANK, N.A.	702,561	7.9%	62.41	127.69
THE COMMONWEALTH BANK	1,506	0.0%	0.00	0.00
COMMERCE BANK OF HENRICO	4,334	0.0%	0.00	0.00
CONSOLIDATED BANK & TRUST CO.	46,074	0.5%	0.25	0.49
DOMINION BANK OF RICHMOND, N.A.	331,195	3.7%	7.40	28.09
FIRST NATIONAL BANK, LOUISVILLE	2,673	0.0%	0.00	0.00
F & M BANK	37,053	0.4%	0.16	0.36
FIRST VIRGINIA BANK - COLONIAL	189,676	2.1%	4.41	9.00
JEFFERSON NATIONAL BANK	307,972	3.4%	11.56	24.01
PEOPLES BANK OF VIRGINIA	9,040	0.1%	0.01	0.01
SOVRAN BANK, N.A.	1,418,758	15.9%	252.81	519.84
UNION BANK & TRUST CO.	8,685	0.1%	0.01	0.01
UNITED VIRGINIA BANK	1,773,577	19.8%	392.04	812.25
TOTAL BANKS	6,225,956	69.6%	974.42	2023.51
SAVINGS & LOANS				
BAY SAVINGS BANK, FSB	20,502	0.2%	0.04	
CARDINAL S&L ASSOC	141,551	1.6%	2.56	
CITIZENS S&L ASSOC.	215,626	2.4%	5.76	
COLONIAL S&L ASSOC.	186,814	2.1%	4.41	
DOMINION FEDERAL S&L ASSOC.	76,965	0.9%	0.81	
FIRST COLONIAL S&L ASSOC.	0	0.0%	0.00	
FIRST FEDERAL SAVINGS BANK OF VA.	31,096	0.3%	0.09	
FRANKLIN FEDERAL S&L ASSOC.	284,632	3.2%	10.24	
HERITAGE S&L ASSOC.	550,177	6.2%	38.44	
INVESTORS S&L ASSOC.	489,452	5.5%	30.25	
LINCOLN S&L ASSOC.	156,400	1.7%	2.89	
PIONEER FEDERAL S&L ASSOC.	49,266	0.6%	0.36	
SECURITY FEDERAL S&L ASSOC.	198,988	2.2%	4.84	
UNION MUTUAL S&L ASSOC.	0	0.0%	0.00	
VIRGINIA FEDERAL S&L ASSOC.	258,425	2.9%	8.41	
VIRGINIA FIRST SAVINGS, FSB	53,342	0.6%	0.36	
TOTAL SAVINGS & LOANS	2,713,236	30.4%	109.46	
TOTAL BANKS AND SAVINGS AND LOANS	8,939,192	100.0%	1083.88	
TOTAL CREDIT UNIONS	353,067	3.8%		
TOTAL FINANCIAL INSTITUTIONS	9,292,259	100.0%	1083.88	

DATA FOR 1980

BANKS	TOTAL DEPOSITS	PERCENT OF MARKET SHARE	CURRENT HHI	HHI EXCLUDING THRIFTS & CUs
BANK OF VIRGINIA	506,831	11.5%	132.25	259.21
CENTRAL FIDELITY BANK, N.A.	355,212	8.1%	65.61	127.69
THE COMMONWEALTH BANK	0	0.0%	0.00	0.00
COMMERCE BANK OF HENRICO	0	0.0%	0.00	0.00
CONSOLIDATED BANK & TRUST CO.	31,046	0.7%	0.49	1.00
DOMINION BANK OF RICHMOND, N.A.	127,921	2.9%	8.41	16.81
FIRST NATIONAL BANK, LOUISVILLE	0	0.0%	0.00	0.00
F & M BANK	41,247	0.9%	0.81	1.69
FIRST VIRGINIA BANK - COLONIAL	120,331	2.7%	7.29	14.44
JEFFERSON NATIONAL BANK	239,098	5.4%	29.16	57.76
PEOPLES BANK OF VIRGINIA	0	0.0%	0.00	0.00
SOVRAN BANK, N.A.	761,684	17.3%	299.29	585.64
UNION BANK & TRUST CO.	0	0.0%	0.00	0.00
UNITED VIRGINIA BANK	960,932	21.8%	475.24	936.36
TOTAL BANKS	3,144,302	71.4%	1018.55	2000.6
SAVINGS & LOANS				
BAY SAVINGS BANK, FSB	0	0.0%	0.00	
CARDINAL S&L ASSOC	0	0.0%	0.00	
CITIZENS S&L ASSOC.	134,809	3.1%	9.61	
COLONIAL S&L ASSOC.	51,964	1.2%	1.44	
DOMINION FEDERAL S&L ASSOC.	0	0.0%	0.00	
FIRST COLONIAL S&L ASSOC.	567	0.0%	0.00	
FIRST FEDERAL SAVINGS BANK OF VA.	1,574	0.0%	0.00	
FRANKLIN FEDERAL S&L ASSOC.	253,819	5.8%	33.64	
HERITAGE S&L ASSOC.	271,130	6.2%	38.44	
INVESTORS S&L ASSOC.	47,739	1.1%	1.21	
LINCOLN S&L ASSOC.	25,892	0.6%	0.36	
PIONEER FEDERAL S&L ASSOC.	20,864	0.5%	0.25	
SECURITY FEDERAL S&L ASSOC.	179,276	4.1%	16.81	
UNION MUTUAL S&L ASSOC.	7,304	0.2%	0.04	
VIRGINIA FEDERAL S&L ASSOC.	214,532	4.9%	24.01	
VIRGINIA FIRST SAVINGS, FSB	48,936	1.1%	1.21	
TOTAL SAVINGS & LOANS	1,258,406	28.6%	127.02	
TOTAL BANKS AND SAVINGS AND LOANS	4,402,708	100.0%	1145.57	
TOTAL CREDIT UNIONS	117,227	2.6%		
TOTAL FINANCIAL INSTITUTIONS	4,519,935	100.0%	1145.57	

STAFFORD
KING GEORGE
ST. MARYS
SPOTSYLVANIA
Fredericksburg
Ferry Farms
Falmouth
Potomac Run
Fairview Beach
Spotsylvania
Four Mile Fork
King George
George Washington Birthplace Nat. Mon.
Wakefield
WESTMORELAND
CAROLINE
Bowling Green
Rappahannock Academy
Port Royal
Tappahannock
Ruther Glen
Rutherglen
Montpelier
Gum Tree
HANOVER
Hanover
Ashland
Rockville
KING WILLIAM
King William
KING AND QUEEN
King and Queen C.H.
Goochland
Atlee
Chamberlayne Farms
Crestview
Monument Hills
Beverly Hills
Laburnum Manor
Mechanicsville
Highland Park
Richmond
ATAN
Powhatan
Midlothian
Montrose
Lewis Gardens
NEW KENT
New Kent
Woodhaven Shores
Providence Forge
Marion Hill
Ampthill
Varina
Bensley
CHESTERFIELD
Chesterfield
Kingsland
Centralia
CHARLES CITY
Charles City
Bermuda Hundred
Hopewell
Petersburg
Jefferson Park
PRINCE GEORGE
Prince George
GLOUCESTER
Gloucester
Williamsburg
Yorktown
Jamestown
Lightfoot
Toano
Dinwiddie C.H.
Church Road
Pook Siding
Sutherland
Matoaca
SURRY
Surry
Elberon
Disputanta
Waverly
DINWIDDIE
Dinwiddie
De Witt
Stony Creek
SUSSEX
Sussex
Wakefield
McKenney
Rawlings
James River

LOCATION	DATA FOR 1980 # OF BRANCHES	DATA FOR 1980 TOTAL DEPOSITS	DATA FOR 1980 MARKET SHARE	DATA FOR 1986 # OF BRANCHES	DATA FOR 1986 TOTAL DEPOSITS	DATA FOR 1986 MARKET SHARE
CHESTERFIELD COUNTY	49	270,152	100.0%	58	819,853	100.0%
AY SAVINGS BANK, FSB	0	0	0.0%	2	5,140	0.6%
ANK OF VIRGINIA	5	24,924	9.2%	6	117,110	14.3%
ARDINAL S&L ASSOC	0	0	0.0%	1	33,925	4.1%
ENTRAL FIDELITY BANK, N.A.	5	21,608	8.0%	5	70,874	8.6%
HESTERFIELD EMPLOYEES FCU	1	1,447	0.5%	1	4,535	0.6%
ITIZENS S&L ASSOC	1	0	0.0%	1	521	0.1%
OLONIAL S&L ASSOC	1	25,381	9.4%	1	77,524	9.5%
HE COMMONWEALTH BANK	0	0	0.0%	1	1,506	0.2%
OMINION BANK OF RICHMOND,N.A.	1	13,560	5.0%	2	41,831	5.1%
IBERS FCU	0	0	0.0%	1	8,018	1.0%
IRST COLONIAL S&L ASSOC	1	567	0.2%	0	0	0.0%
IRST FEDERAL SAVINGS BANK OF VA.	1	1,574	0.6%	2	31,096	3.8%
IRST VIRGINIA BANK - COLONIAL	3	11,693	4.3%	4	25,382	3.1%
& M BANK	4	22,206	8.2%	1	1,045	0.1%
AMNER FCU	1	73	0.0%	1	131	0.0%
ERITAGE S&L ASSOC	2	11,856	4.4%	2	44,167	5.4%
INVESTORS S&L ASSOC	2	2,917	1.1%	3	64,977	7.9%
EFFERSON NATIONAL BANK	6	30,701	11.4%	6	40,276	4.9%
LINCOLN S&L ASSOC	2	12,260	4.5%	2	41,895	5.1%
PEOPLES BANK OF VIRGINIA	0	0	0.0%	1	9,040	1.1%
PIONEER FEDERAL S&L ASSOC	3	20,864	7.7%	3	49,266	6.0%
SECURITY FEDERAL S&L ASSOC	2	8,943	3.3%	2	19,028	2.3%
SOVRAN BANK, N.A.	4	27,969	10.4%	4	64,080	7.8%
UNITED VIRGINIA BANK	2	18,849	7.0%	4	42,728	5.2%
VIRGINIA FEDERAL S&L ASSOC	1	8,887	3.3%	1	18,518	2.3%
VIRGINIA FIRST SAVINGS, FSB	1	3,873	1.4%	1	7,240	0.9%
GOOCHLAND COUNTY	5	38,316	100.0%	5	62,451	100.0%
DOMINION BANK OF RICHMOND, N.A.	2	6,784	17.7%	2	11,247	18.0%
JEFFERSON NATIONAL BANK	3	31,532	82.3%	3	51,204	82.0%

LOCATION	DATA FOR 1980 # OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE	DATA FOR 1986 # OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE
HANOVER COUNTY	19	202,089	100.0%	21	450,015	100.0%
NK OF VIRGINIA	0	0	0.0%	1	3,134	0.7%
TIZENS S&L ASSOC	1	9,228	4.6%	1	19,753	4.4%
RST VIRGINIA BANK - COLONIAL	5	55,003	27.2%	5	70,972	15.8%
ANKLIN FEDERAL S&L ASSOC	1	17,550	8.7%	1	28,351	6.3%
NOVER COUNTY EMPLOYEES CU	1	153	0.1%	1	602	0.1%
RITAGE S&L ASSOC	1	17,238	8.5%	1	22,815	5.1%
A FEDERAL CREDIT UNION	1	48	0.0%	0	0	0.0%
VESTORS S&L ASSOC	0	0	0.0%	1	39,900	8.9%
NCOLN S&L ASSOC	1	3,911	1.9%	1	23,361	5.2%
CURITY FEDERAL S&L ASSOC	1	10,940	5.4%	1	16,451	3.7%
VRAN BANK, N.A.	2	31,049	15.4%	2	104,854	23.3%
ION BANK & TRUST CO	0	0	0.0%	1	8,685	1.9%
ITED VIRGINIA BANK	4	53,907	26.7%	4	100,174	22.3%
RGINIA FIRST SAVINGS, FSB	1	3,062	1.5%	1	10,963	2.4%
HENRICO COUNTY	79	678,819	100.0%	85	1,678,021	100.0%
Y SAVINGS BANK, FSB	0	0	0.0%	2	6,400	0.4%
NK OF VIRGINIA	12	106,454	15.7%	10	208,327	12.4%
RDINAL S&L ASSOC	0	0	0.0%	1	86,871	5.2%
NTRAL FIDELITY BANK, N.A.	11	59,816	8.8%	11	239,299	14.3%
ITIZENS S&L ASSOC	4	37,547	5.5%	5	71,295	4.2%
OLONIAL S&L ASSOC	3	14,150	2.1%	3	56,732	3.4%
OMMERCE BANK OF HENRICO	0	0	0.0%	1	4,334	0.3%
OMINION BANK OF RICHMOND, N.A.	6	43,908	6.5%	5	90,018	5.4%
IRST NAT BK, LOUISVILLE	0	0	0.0%	1	2,673	0.2%
IRST VIRGINIA BANK - COLONIAL	4	13,386	2.0%	6	28,262	1.7%
RANKLIN FEDERAL S&L ASSOC	1	7,579	1.1%	1	16,537	1.0%
ERITAGE S&L ASSOC	5	90,450	13.3%	5	256,216	15.3%
TA FCU	0	0	0.0%	1	36	0.0%
NVESTORS S&L ASSOC	4	33,047	4.9%	3	118,756	7.1%
EFFERSON NATIONAL BANK	7	45,448	6.7%	5	51,479	3.1%
INCOLN S&L ASSOC	1	629	0.1%	1	30,584	1.8%
& M BANK	2	9,925	1.5%	3	2,271	0.1%
ECURITY FEDERAL S&L ASSOC	2	34,495	5.1%	2	63,128	3.8%
OVRAN BANK, N.A.	7	70,701	10.4%	7	135,283	8.1%
NITED VIRGINIA BANK	7	83,669	12.3%	9	152,964	9.1%
IRGINIA FEDERAL S&L ASSOC	3	27,615	4.1%	3	56,556	3.4%

LOCATION	DATA FOR 1980 # OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE	DATA FOR 1986 # OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE
CITY OF RICHMOND	174	3,330,559	100.0%	184	6,281,919	100.0%
ASSOCIATED GREYHOUND FCU	1	1,134	0.0%	1	1,496	0.0%
BANK OF VIRGINIA	15	375,453	11.3%	13	1,064,281	16.9%
BAY SAVINGS BANK, FSB	0	0	0.0%	2	8,962	0.1%
BEACON PRESS EMPLOYEES FCU	1	59	0.0%	1	71	0.0%
BELLWOOD FCU	1	11,451	0.3%	1	16,653	0.3%
BINSY FCU	1	102	0.0%	0	0	0.0%
BLUE CROSS EMPLOYEES CU, INC	1	744	0.0%	1	2,216	0.0%
BRISTEEL FCU	1	82	0.0%	1	21	0.0%
C. M. EMPLOYEES FCU	1	101	0.0%	1	207	0.0%
CALL FCU	1	4,217	0.1%	1	30,899	0.5%
CARDINAL S&L ASSOC	0	0	0.0%	1	20,755	0.3%
CENTRAL FIDELITY BANK, N.A.	11	273,788	8.2%	10	392,388	6.2%
C & O EMPLOYEES CU, INC	1	4,470	0.1%	1	8,846	0.1%
C & P TELEPHONE EMPLOYEES FCU	1	3,815	0.1%	1	14,914	0.2%
CHIPPENHAM HOSP EMPLOYEES FCU	0	0	0.0%	1	862	0.0%
CITIZENS S&L ASSOC	4	88,034	2.6%	4	124,057	2.0%
COLONIAL S&L ASSOC	2	12,433	0.4%	2	52,558	0.8%
CONSOLIDATED BANK & TRUST CO	3	31,046	0.9%	3	46,074	0.7%
CORA GATED FCU	1	80	0.0%	0	0	0.0%
COUNTY OF HENRICO FCU	1	5,074	0.2%	1	14,077	0.2%
DIR CREDIT UNION, INC	1	1,445	0.0%	1	2,664	0.0%
DIXIECON FCU	1	77	0.0%	1	81	0.0%
DOMINION BANK OF RICHMOND, N.A.	5	63,669	1.9%	8	188,099	3.0%
DOMINION CU, INC	0	0	0.0%	1	10,352	0.2%
DOMINION FEDERAL S&L ASSOC	0	0	0.0%	2	76,965	1.2%
DUPONT FIBERS EMPLOYEES CU, INC	1	15,115	0.5%	1	44,108	0.7%
EXXON EMPLOYEES FCU	1	327	0.0%	1	206	0.0%
F & M BANK	1	9,116	0.3%	2	33,737	0.5%
FFV FCU	1	276	0.0%	1	328	0.0%
FIFTH ST. BAPTIST CHURCH FCU	1	32	0.0%	1	56	0.0%
FIRST BAPTIST FCU	0	0	0.0%	1	9	0.0%
FIRST VIRGINIA BANK - COLONIAL	5	40,249	1.2%	7	65,060	1.0%
FORENBORO FCU	1	883	0.0%	1	7,386	0.1%
FRANKLIN FEDERAL S&L ASSOC	4	228,690	6.9%	4	239,744	3.8%
GENERAL MEDICAL CORP FCU	1	250	0.0%	0	0	0.0%
HERITAGE S&L ASSOC	7	151,586	4.6%	5	226,979	3.6%
I B E W LOCAL 669 FCU	1	1,114	0.0%	1	1,195	0.0%
INVESTORS S&L ASSOC	2	11,775	0.4%	4	265,819	4.2%
JEFF DAVIS FCU	0	0	0.0%	1	100	0.0%
JEFFERSON NATIONAL BANK	9	131,417	3.9%	7	165,013	2.6%
LIFE OF VIRGINIA FCU	1	1,852	0.1%	1	4,394	0.1%
LINCOLN S&L ASSOC	1	9,092	0.3%	2	60,560	1.0%

LOCATION	DATA FOR 1980 # OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE	DATA FOR 1986 # OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE
CITY OF RICHMOND						
MACC FCU	0	0	0.0%	1	1,885	0.0%
MCGUIRE V A H FCU	1	4,362	0.1%	1	13,771	0.2%
MILLER & RHOADES FCU	1	1,268	0.0%	1	1,219	0.0%
NABISCO EMPLOYEES FCU	1	206	0.0%	1	819	0.0%
O-B-M FCU	1	73	0.0%	1	125	0.0%
RBR FCU	0	0	0.0%	1	25	0.0%
R F & P RICHMOND FCU	1	1,733	0.1%	1	3,975	0.1%
RECO EMPLOYEES CU, INC	1	298	0.0%	1	264	0.0%
REYMET FCU	1	1,434	0.0%	1	8,714	0.1%
REYNOLDS FOIL FCU	1	1,400	0.0%	1	3,105	0.0%
RICHFOOD EMPLOYEES FCU	1	270	0.0%	1	1,337	0.0%
RICHMOND CONTINENTAL FCU	1	124	0.0%	1	240	0.0%
RICHMOND FEDERAL EMPLOYEES FCU	1	2,520	0.1%	1	8,127	0.1%
RICHMOND FIRE DEPT CU, INC	1	787	0.0%	1	2,056	0.0%
RICHMOND MEM HOSP EMPLOYEES CU, INC	1	712	0.0%	1	1,434	0.0%
RICHMOND NEWSPAPERS EMPLOYEES FCU	1	770	0.0%	1	1,134	0.0%
RICHMOND POLICE DEPT CU, INC	1	761	0.0%	1	941	0.0%
RICHMOND POSTAL CU, INC	1	8,250	0.2%	1	17,849	0.3%
RICHMOND TEACHERS FCU	1	1,906	0.1%	1	3,240	0.1%
RICHMOND TRANSIT FCU	1	662	0.0%	1	1,508	0.0%
RICHMOND VA MUNICIPAL FCU	1	3,502	0.1%	1	13,127	0.2%
RIVERVIEW BAPTIST FCU	0	0	0.0%	1	10	0.0%
S. C. L. EMPLOYEES CU, INC	1	189	0.0%	1	195	0.0%
S. M. H. EMPLOYEES CU, INC	1	351	0.0%	1	732	0.0%
SAVE FCU	1	162	0.0%	1	198	0.0%
SEABOARD COAST LINE CU, INC	1	548	0.0%	0	0	0.0%
SECURITY FEDERAL S&L ASSOC	3	124,898	3.8%	3	100,381	1.6%
SOUTHERN AID FCU	1	35	0.0%	1	22	0.0%
SOUTHERN STATE EMPLOYEES' CU, INC	1	1,865	0.1%	1	3,310	0.1%
SOVRAN BANK, N.A.	18	631,965	19.0%	18	1,114,541	17.7%
SPRUANCE CELLOPHANE EMPLOYEE'S CU	1	3,116	0.1%	1	4,421	0.1%
ST. PAUL'S BAPTIST FCU	1	14	0.0%	1	22	0.0%
STATE EMPLOYEES' CU, INC.	1	18,306	0.5%	1	76,963	1.2%
THALHIMER'S CU, INC.	1	1,727	0.1%	1	1,807	0.0%
THRIFTY FCU	0	0	0.0%	1	160	0.0%
TYPO FCU	1	161	0.0%	1	129	0.0%
U B C P RICHMOND FCU	1	70	0.0%	1	255	0.0%
UNION MUTUAL S&L ASSOC	1	7,304	0.2%	0	0	0.0%
UNITED VIRGINIA BANK	14	804,507	24.2%	16	1,477,711	23.5%
UNIVERSITY CU	1	94	0.0%	1	194	0.0%
VEPCO CU, INC	1	1,726	0.1%	0	0	0.0%
VIRGINIA BOXER FCU	1	170	0.0%	1	251	0.0%

LOCATION	DATA FOR 1980			DATA FOR 1986		
	# OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE	# OF BRANCHES	TOTAL DEPOSITS	MARKET SHARE
CITY OF RICHMOND						
VIRGINIA FEDERAL S&L ASSOC	5	178,030	5.3%	5	183,351	2.9%
VIRGINIA FIRST SAVINGS, FSB	3	42,001	1.3%	3	35,139	0.6%
VIRGINIA FOOD DEALERS FCU	1	538	0.0%	1	621	0.0%
VA UNITED METHODIST CONFERENCE FCU	1	1,969	0.1%	1	3,645	0.1%
VIRGINIA MUTUAL EMPLOYEES FCU	1	121	0.0%	1	67	0.0%
WARDS FCU	1	152	0.0%	0	0	0.0%
WILLIAM BYRD PRESS FCU	1	454	0.0%	1	707	0.0%

Explanation of Resources

The Richmond, Virginia Ranally Metro Area (RMA) is comprised geographically of the City of Richmond, and portions of Chesterfield County, Goochland County, Hanover County, and Henrico County (see Appendix C for geographic boundaries). The southeastern portion of Henrico County, which borders Charles City County, is not represented in the Richmond RMA. This area is primarily rural and has limited commercial activity. There are no financial institutions in this segment of Henrico County. In Chesterfield County, two areas of the county are not represented. The first area is the southern tip of Chesterfield County which includes the City of Colonial Heights and Ettrick, Virginia. This geogrpahic area is included in the Petersburg, Virginia RMA. The second area is the southwestern portion of Chesterfield County which has a sparse population base and has had little commercial or residential development. The eastern portion of Goochland County is the only area of the county represented in the Richmond RMA. This segment extends into the fast-growing western segment of Henrico County. In Hanover County, the only portion of the county that is not included in the RMA is the northwestern segment which borders Louisa County and Spotsylvania County. Although this area contains approximately $90 million in deposit branches, it is predominantly agricultural and sparsely populated. The rest of Hanover County is represented by the Richmond RMA and contains approximately 80% of the deposits in the County.

The following banking branches operated in those portions of Chesterfield, Goochland, and Hanover Counties not represented by the Richmond RMA. As of June 30, 1986, the total deposit base of these branches equaled $130,794,000, and accounted for only 1.4% of the total Richmond RMA deposits reflected in Appendix A. Due to the minor level of deposits in these branches, these balances were not subtracted from the total Richmond RMA deposits. For purposes of this paper, all references to the Richmond RMA include these branches and their respective deposit balances.

		Location	County	Deposits (in $000)
1.	Central Fidelity Bank, N.A.	Ettrick	Chesterfield	$ 7,293
2.	Jefferson National Bank	Goochland	Goochland	32,729
3.	United Virginia Bank	Beaverdam	Hanover	13,995
4.	United Virginia Bank	Doswell	Hanover	12,098
5.	Sovran Bank, N.A.	Montpelier	Hanover	64,679

The Richmond RMA accounts for $9,292,259, or 15.6% of the total deposits in the State of Virginia for the period ended June 30, 1986. The Richmond RMA deposit structure indicates that commercial banks control 67% of the deposit base, compared to 29.2% for savings and loans, and 3.8% for credit unions. However, the average rate of growth for savings and loans of 115.6% has outpaced the 98% average growth rate recorded for commercial banks during the six year period ended June 30, 1986. This high level of growth for the thrifts is predominantly centered in Chesterfield and Henrico Counties.

Appendix A reflects deposit data, segregated by the city and county in the Richmond RMA, for both June 30, 1980 and June 30, 1986. The deposit data was obtained from the Federal

Deposit Insurance Corporation (FDIC). The data indicates the composition of financial institutions within the various political boundaries of the Richmond RMA on an individual basis and on a consolidated basis. In addition, the deposit growth which is shown by both dollar amount and percentage, is for the period of June 30, 1980 to June 30, 1986.

Appendix B of this report reflects the deposit concentration of each institution in the Richmond RMA. The column entitled "Percent of Market Share" represents the percentage of total deposits held by each commercial bank and thrift institution. The deposits held by the credit unions were shown to reflect their total market presence; however, these deposits were not used for the analysis of market concentration. The "Current HHI" represents the Herfindahl-Hirschman Index when accounting for 100% of the total deposits of both the commercial banks and thrift institutions. The final column entitled "HHI Excluding Thrifts & CUs" reflects the HHI without considering any type of competitor for the commercial banks. In its purest sense, this final column is reflective of commercial banking as a separate line of commerce. The data is shown for both the period ended June 30, 1980 and June 30, 1986.

Glossary of Bank Merger Terms

Acquisition -
The process of taking control of stock or assets usually of a target corporation.

Acquiring Corporation -
A corporation which acquires the stock or assets of a target corporation, generally in a merger.

Assets -
Anything owned by a bank which has commercial or exchange value. Assets may consist of specific property or claims against others.

Bank Holding Company -
Any company that directly or indirectly owns, controls, or holds the power to vote 25 percent or more of the voting shares of one or more banks or controls in any manner the election of a majority of the directors of a bank.

Capital -
The amount subscribed and paid by stockholders to permit a bank to function as such. Capital requirements of banks are governed by size of the community in which they are chartered to operate. Capital must be fully paid in cash before a bank is allowed to open for business.

Chain Banking -
An arrangement whereby the control of a number of banks is exercised through entire or majority ownership of stock by a group (not a corporate entity) who take an active role in formulating the policies of the banks.

Concentrated Market -
A specific geographic area in which a few financial institutions aggregately hold such a large percentage of the banking resources that they are in a position to dominate the competitive environment in the market.

Liabilities -
Funds a bank owes. The current indebtedness of a bank to those other than depositors is usually small in total, and represents obligations that are to be paid on a certain future date, such as notes, acceptances, and taxes. The capital structures are listed in bank statements as liabilities, but these accounts are the net worth of the bank, and represent the liability owing the stockholders of the bank.

Merger Transaction -
A transaction in which one or more bank entities combine into another under the charter of one of the proponents. The resultant bank assumes all the liabilities of the banks involved.

Parent Corporation -
A corporation which owns generally 100% of another corporation such as a subsidiary corporation.

Phantom Bank Merger -
Any merger or other such transaction in the nature of a corporate reorganization which, in and of itself, would have no effect on competition.

Purchase and Assumption Transaction -
A merger-type transaction in which one bank acquires the business of another bank (or banks) with the original bank's charter retained.

Purchasing Corporation -
A corporation which purchases the stock or assets of a target corporation, generally in a taxable transaction.

Target Corporation -
A corporation whose stock or assets will be acquired.

Target Shareholders -
Shareholders of a target corporation who generally sell or exchange their stock in an acquisition.

BIBLIOGRAPHY

Books

Alhadeff, David A. Monopoly and Competition in Banking. Berkeley, California: University of California Press, 1954.

Hall, George R. and Phillips, Charles F., Jr. Bank Mergers and The Regulatory Agencies. Washington: Board of Governors of The Federal Reserve System, 1964.

Kinter, Earl W. Primer on the Law of Mergers. New York: The MacMillion Company, 1973.

Rand McNally & Company. Commercial Atlas and Marketing Guide. Chicago: Rand McNally & Company.

Periodicals - Magazines

Austin, Douglas V. "Defining the Market Area of a Bank," The Bankers Magazine, Autumn, 1973.

Baker, Donald I. and Blumenthal, William. "Demystifying the Herfindahl-Hirschman Index," Mergers and Acquisitions, Summer, 1984.

Baker, James C. and Severiens, Jacobus T. "Concentration in Bank Markets: Do Thrifts Make a Difference?," American Business Review, January, 1988.

Baxter, Nevins D. and Hawke, John D., Jr. "Can the Banking Agencies Predict Market Entry?," Issues in Bank Regulation, Autumn, 1982.

Burke, Jim, Rhoades, Stephen A., and Wolken, John, "Thrift Institutions and Their New Powers," The Journal of Commercial Bank Lending, June, 1987.

Calem, Paul, "Interstate Bank Mergers and Competition in Banking," Federal Reserve Bank of Philadelphia Business Review, January-February, 1987.

Di Clemente, John J. and Fortier, Diana Alamprese "Bank Mergers Today: New Guidelines, Changing Markets." Federal Reserve Bank of Chicago Economic Perspectives, May-June, 1984.

Guerin-Calvert, Margaret E. "The 1982 Department of Justice Merger Guidelines: Applications to Banking Mergers." Issues in Bank Regulation, Winter, 1983.

Haymes, Harmon H. "Bank Mergers and Competition," Carroll Business Bulletin, May, 1965.

King, B. Frank, "New Tests of Banking Market Limits" Federal Reserve Bank of Atlanta, Monthly Review, March, 1977.

Rhoades, Stephen A. "Merger Guidelines: Their Purpose, Construction, and Implementation," Bankers Magazine, January-February, 1983.

Wagner, George M. "Issues in Market Share Measurement," Bank Marketing, April, 1985.

Welker, Donald L. "Thrift Competition: Does It Matter?" Federal Reserve Bank of Richmond Economic Review, January-February, 1986.

Whitehead, David D. "Relevant Georgraphic Banking Markets: How Should They Be Defined," Federal Reserve Bank of Atlanta, Economic Review, January-February, 1980.

Yanni, Joseph A. "Managing the Competitive Factors in a Merger," Issues in Bank Regulation, August, 1983.

Periodicals - Newspapers

"Benefits of Competition Cited as Main Argument in Favor of Branch Banking," The American Banker, Editorial, September 27, 1978.

Cyrnak, Anthony W. "Banking Antitrust in Transition," Federal Reserve Bank of San Francisco FRBSF Weekly Letter, December 26, 1986.

Furlong, Frederick T. "The Wells Fargo-Crocker Acquisition," Federal Reserve Bank of San Francisco FRBSF Weekly Letter, November 28, 1986.

Furlong, Frederick T. "Assessing Bank Antitrust Standards" Federal Reserve Bank of San Francisco FRBSF Weekly Letter, May 15, 1987.

Fraust, Bart, "Fed Has Eased Its Stance on Mergers," The American Banker, January 20, 1984.

Fraust, Bart, "Approval of Takeover Twice Denied Shows How Fed Policy Has Changed," The American Banker, September 19, 1965.

Herlihy, Edward D. "The Many Ways of Locking Up Bank Mergers," The American Banker, January 9, 1986.

Naylor, Bartlett, "FDIC Eases and Streamlines Merger Standards," The American Banker, September 24, 1985.

"Mergers, Thrift Power Pose Issue of Public Policy on Competition," The American Banker, August 24, 1977.

Watson, J. Fred, "Antitrust: The Coming Battlefield," The Wall Street Journal, April 14, 1978.

Government Documents and Publications

Federal Deposit Insurance Act, Section 18, as revised January 1, 1974.

Federal Deposit Insurance Corporation. Data Book - Operating Banks and Branches. June, 1980.

Federal Deposit Insurance Corporation. Data Book - Operating Banks and Branches. June, 1986.

Board of Governors of the Federal Reserve System, 12 C.F.R. Chapter 11, "Statement of Policy on Bank Acquisitions," February 26, 1982.

Board of Governors of the Federal Reserve System, "Antitrust Laws, Justice Department Guidelines, and the Limits of Concentration in Local Banking Markets," Federal Reserve Bulletin, June, 1984.

Statutes

The Bank Holding Company Act, 12 U.S.C. 1842(c).

The Bank Merger Act of 1966, 12 U.S.C. 1828(c).

The Clayton Act, 15 U.S.C. 18 (1914).

Speeches and Addresses

Holland, Robert C., Associate Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System. "Research Into Banking Structure and Competition: A Report On The State Of The Art," remarks before the Conference of University Professors sponsored by the American Bankers Association, September 2, 1964, Princeton, New Jersey.

Legal Cases

United States vs. Philadelphia National Bank and Trust Company, 374 U.S. (1963).

United States vs. Phillipsburg National Bank and Trust Company, 388 U.S. (1970).

Interviews

Interview with A. Linwood Gill, III, Senior Financial Analyst, Mergers and Acqusitions Section, Bank Supervision and Regulation, Federal Reserve Bank of Richmond, Richmond, VA.

Interview with Donald L. Welker, Assistant Vice President, Research Department, Federal Reserve Bank of Richmond, Richmond, VA.