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J. Patrick Raines
University of Richmond

Kenneth W. Vance

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AN ASSESSMENT OF THE IMPACT OF THRIFTS ON COMMERCIAL BANK COMPETITION IN THE RICHMOND, VIRGINIA, R.M.A.

by

J. Patrick Raines, Ph.D.
Associate Professor of Economics
University of Richmond

and

Kenneth W. Vance, M.B.A.
Assistant Vice President and Retail Loan Administrator
Investors Savings Bank

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Preface

The co-author, Kenneth W. Vance, is employed by Investors Savings Bank, Richmond, Virginia. The opinions and views expressed herein by this co-author should not be construed as representing directly or indirectly, the views, policies, or interpretations of Investors Savings Bank.

Kenneth W. Vance

Richmond, Virginia
March 1989

INTRODUCTION

"Yes Virginia, there is trouble in the Savings and Loan Industry." Depending upon who one believes, the cost of restructuring and creating a vital thrift industry will be between $50 billion and $100 billion. Nevertheless, political concerns virtually guarantee that the industry which has helped make the American dream a reality will be nurtured (force fed if necessary) back to good health. As the savings and loan industry is rehabilitated, bankers can be expected to increasingly assert that thrift institutions represent a major factor in their markets. Both Federal and State bank regulators will be called upon to place more weight on the presence of thrift deposits in their markets when analyzing the effect on competition from a proposed merger. Further, the inevitable "shake-out" in the thrift industry will increase concentration in some financial markets and necessitate careful consideration in competition analysis by bank regulators.

Recent research has shown that the consideration of thrift institutions as direct competitors with commercial banks can have a material effect on potential mergers and acquisitions in the financial services industry. In 1986, Don Welker of the Federal Reserve Bank of Richmond looked at the effect created by including thrift deposits in selected bank markets in the Fifth Federal Reserve District.[1] The inclusion of 50 percent of thrift deposits resulted in a striking reduction in concentration levels. After thrift deposits were considered, only two of the top ten banking markets remained highly concentrated. Welker concluded from this evidence that the actual competition from thrifts reduces the potential costs of concentration and that regulatory guidelines need not pose a significant barrier to bank acquisitions. In other

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[1]Donald L. Welker, "Thrift Competition: Does It Matter?," Federal Reserve Bank of Richmond, Economic Review (Jan.-Feb. 1986):1-4.

words, thrifts do matter.

A study by Baker and Severiens in 1988 analyzed the impact of thrifts' deposits on bank market structures in rural and metropolitan areas over a two state region.[2] Their findings suggested the impact of thrifts on market concentration is mixed at best. In markets where banking is highly competitive in size and number, a concentration index combining banks and thrifts will be significantly lower for banks alone. In other cases, a banking structure may become less competitive when combined with a market in which thrifts are highly concentrated.[3] The former situation is found more often in metropolitan areas whereas the latter most often occurs in rural areas. The implication of Banker's and Severiens' work is a case-by-case approach is needed due to unique factors inherent in each financial community to establish the impact of thrifts on market structures.

Consistent with the recommendation for a case-by-case analysis of the influence of thrifts on concentration in bank markets, this study analyzes the impact of the thrift industry on the commercial bank market structure in the Richmond, Virginia RMA. Specifically, the impact is assessed by considering several commercial bank merger scenarios. Each acquisition is evaluated by constructuring a four-firm deposit concentration ratio and the Herfindahl-Hirschman index. The impact of thrifts on the market structure is then evaluated in accordance with the merger guidelines of the Federal Reserve Bank and the Comptroller of the Currency; to compute a Herfindahl index the Federal Reserve counts 50 percent of thrifts deposits and the Comptroller

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[2]James C. Baker and J.T. Severiens, "Concentration in Bank Markets: Do Thrifts Make a Difference?," American Business Review (Jan. 1988):1-7.

[3]Ibid., p.7.

considers 100 percent of deposits.

This study extends the research of Welker, Baker and Severiens by investigating the impact of thrifts on the banking market in a single metropolitan area. The distinguishing features are 1) a case-by-case merger scenario approach to competition analysis, and 2) focusing upon the significance of thrift deposits in a unique geographic market, rather than by considering district or statewide competition effects.

A background of the historical application of antitrust to commercial banks is presented in the following section. Criteria and guidelines used by bank regulators to evaluate financial markets are presented next. Then several significant commercial bank merger scenarios are modeled in the Richmond, Virginia RMA to determine the impact of thrifts in the market. Finally, policy implications of considering thrift deposits in competition analysis are discussed.

BACKGROUND

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.[4] 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

[4]David A. Alhadeff, Monopoly and Competition in Banking, Berkeley: University of California Press, 1954, p.2.

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.[5]

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

[5]Ibid.

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."[6] In affirming Section 7 of the Clayton Act to bank mergers, the Supreme Court stated "...that the cluster of products (various kinds of credit) and services (such as checking account and trust administration) denoted by the term "commercial banking," ...composes a distinct line of commerce..."[7] 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 proposed far fewer rejections of both horizontal and market extension mergers.

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[6]The Clayton Act, 15 U.S.C. 18 (1814).

[7]"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.[8] 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. These Acts gave thrift institutions, nationwide, the ability to make 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.

On the judicial side, the U.S. Fifth Circuit Court of Appeals in 1981 had two important decisions.[9] 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

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

[9]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, p.2.

four specific 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 market, and (4) alternative entry by the acquiring firm would significantly encourage competition in the market structure.[10]

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.[11] 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.[12] Another substantive factor that has greatly facilitated bank mergers has been the use of branch and bank divestitures to eliminate or reduce the negative effects of certain horizontal mergers.

These events have resulted in approvals of mergers and acquisitions which would probably have been denied under the narrower interpretation of the product market. Specifically, since 1985 the Comptroller's Office has approved

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[10]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.

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

[12]Stephen A. Rhoades, "Merger Guidelines: Their Purpose, Construction, and Implementation," Bankers Magazine, January-February, 1983, p.29.

two acquisitions involving large holding companies citing that thrift deposits in the areas lowered concentration to acceptable levels. One merger involved the acquisition of Centran Corporation by Society National Corporation in Cleveland. A second was for a Pennsylvania bank merger in which the Comptroller held that all firms offering financial services in the area should be taken into consideration.

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 represents a commercial bank's competitor is subject to debate. 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 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 commercial 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 fully utilized their existing powers. 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[13] 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 meet the Department of Justice guidelines and consequently to secure approval for mergers and acquisitions involving financial institutions.

Defining A Relevant Product Market

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.

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

"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."[14]

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,[15] it is a bench mark 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.

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".[16] This definition failed to discount the large concentration of commercial deposits

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

[15] 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.

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

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".[17]

Once the primary service area (or relevant geographic banking area) is defined, it is relevant for all banks located 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".[18] 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

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[17] Ibid

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

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"[19] 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 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".[20]

As applied to banking, it is evident that many basic banking services can 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 thrifts had the ability to offer consumer

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[19] Rand McNally & Company. Commercial Atlas and Marketing Guide. Chicago: Rand McNally & Company, 1985.

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

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 loans, including overdrafts on transaction accounts".[21]

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.

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."[22] 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

[21] Ibid

[22] Donald L. Walker, "Thrift Competition: Does it Matter?," Federal

control a dominant share of the market, however, the ratio does not tell how many institutions may hold the remaining market share of 20%."[23]

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 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 the following allocation of market shares:

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

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 divided 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

[23]Ibid.

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."[24] 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.
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> 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 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-merger HHI, the presence or absence of [nonstatistical factors discussed elsewhere in the guidelines] that the merger is not likely substantially to lessen competition.
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> 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

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[24]Interview with A. Linwood Gill, III, Bank Supervision and Regulation Department, Federal Reserve Bank of Richmond, Richmond, Virginia.

> 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."[25]

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 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

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[25]Donald I. Baker and William Blumenthal, "Demystifying the Herfindahl-Hirschman Index," <u>Mergers and Acquisitions</u>, Summer, 1984, p. 46.

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. As previously noted, Welker's study discussed the magnitude of thrift deposits in the top ten banking markets in the Fifth Federal Reserve District.[26] Subsequently, Baker and Severiens addressed the impact of thrift institutions in the less urban areas of the State of Ohio.[27] Although each of these studies concluded that thrifts do make a difference, neither addressed a specific merger situation.

This study further develops the findings of other studies and explores the implications of other studies in that a case by case analysis is necessary to determine the true competitive impact of mergers in the financial industry. The following 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 the four-firm deposit concentration ratio and the Herfindahl-Hirschman Index which are the commonly accepted methods of analyzing market concentration. Each of the merger situations addresses specific market conditions in the Richmond RMA. Additionally, each case will evaluate the

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

[27]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.

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 Signet Bank/Virginia (formerly 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 Signet Bank/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 (F&M) and Virginia National Bank, Norfolk, Virginia (VNB). 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).

Based on deposit data as of June 30, 1980, the combined institutions controlled $761.7 million, or 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. At the time of the merger, the Department of Justice relied on the Four Firm Deposit Concentration Ratio to measure the degree of competition in a market. Schedule B below indicates that the post-merger Four Firm Deposit Concentration Ratio was 82.2%. The balance of the market, 17.8%, was controlled by ten (10) other commercial banking institutions. As a result of this high concentration level, the divestiture of two branches in the Richmond, Virginia RMA would be required prior to seeking merger approval from the Department of Justice. Although the combination of these two entities would appear to require a higher level of divestiture, VNB had only a minor market presence in the Richmond, Virginia RMA.

Concentration Measures
(Case #1)

Schedule A

Herfindahl-Hirschman Index
(As of June 30, 1980)

	Excluding Thrift Deposits	Including 100% of Thrift Deposits	Including 50% of Thrift Deposits
Pre-merger	1,882.7	1,087.1	1,583.4
Post-merger	2,000.6	1,145.6	1,666.0
Net Increase	117.9	58.5	82.6

Concentration Measures
(Case #1)

Schedule B

Four Firm Deposit Concentration Ratio *
(As of June 30, 1980)

	Excluding Thrift Deposits	Including 100% of Thrift Deposits	Including 50% of Thrift Deposits
Pre-merger	79.4%	56.7%	66.2%
Post-merger	82.2%	58.7%	68.5%
Net Increase	2.8%	2.0%	2.3%

**Includes deposits for Signet Bank/Virginia, Central Fidelity, N.A., Crestar, and Virginia National Bank.*

Subsequent to the merger, the Department of Justice revised its merger guidelines and instituted the utilization of the Herfindahl-Hirschman Index (HHI). An HHI of 1800 or more points indicates a highly concentrated market and suggests that competition may be lessened by the presence of larger institutions. The Department of Justice, with respect to commercial bank mergers, is likely to challenge mergers in which the post-merger HHI exceeds 1800 points and the net increase is 200 points or more. Utilizing the revised guidelines, the post merger HHI at the time of the acquisition was 2000.6 points, representing a net increase of 117.9 points. When 100% of the thrift deposits are taken into consideration, the post merger HHI drops to 1,145.6 points. Moreover, the net increase between the pre-merger and post-merger HHI was only 58.5 points.

The decline in the HHI reflects the significant market presence of the thrift institutions. As of June 30, 1980, thrift institutions in the Richmond, Virginia RMA had 78 branch offices and total deposits of approximately $1.26 billion. These deposits represented 27.8% of the total deposits held by all financial institutions in the Richmond, Virginia RMA. Moreover, seventy-two

(72) of these offices were in localities in which F&M held a significant market share. The six remaining offices were in Hanover Country where VNB did not have a market presence and F&M had only one office with total deposits of $24.1 million, or 12.1% of the Hanover Country market.

In summary, the addition of thrift deposits in either the HHI or Four Firm Deposit Concentration Ratio calculations strongly suggests that the merger of VNB and F&M could have been consummated without the divestiture of branches in the Richmond, Virginia RMA. This case also indicates that utilizing the Department of Justice revised merger guidelines, it is doubtful that the merger would have been contested since the post-merger HHI and net increase in the HHI criterion were not both fulfilled when consideration was given to either 100% or 50% of the thrift deposits. More likely, the merged institutions would have probably closed one of the offices due to the inefficiency of operating two offices so close geographically.

Case #2

The following case will demonstrate the impact on a hypothetical merger of utilizing the Department of Justice's revised merger guidelines. Moreover, by calculating the impact of thrift deposits at both 50% and 100% of their market value, this study will highlight the supposition that thrift institutions must be considered when using either the Herfindahl-Hirschman Index or the Four Firm Deposit Concentration Ratio.

This case is based on the assumed merger of Signet Bank/Virginia and Central Fidelity Bank, N.A. in the Richmond, Virginia RMA. As of June 30, 1986, Signet Bank/Virginia (Signet) controlled approximately $1.4 billion, or 22.4% of the total deposits held by commercial banks in the Richmond, Virginia RMA. At that time Central Fidelity Bank, N.A. (CFB) had total deposits of

$702.6 million, or 11.3% of the commercial banking deposits. Collectively, the two commercial banks accounted for $2.1 billion, or 33.7% of the commercial banking deposits and 56 banking offices, or 30.6% of the total commercial banking offices.

Although Signet and CFB were the third and fourth largest financial institutions in the Richmond, Virginia RMA, the significance of their combined market share is emphasized by the following schedules.

Concentration Measures
(Case #2)

Schedule A

Herfindahl-Hirschman Index
(As of June 30, 1986)

	Excluding Thrift Deposits	Including 100% of Thrift Deposits	Including 50% of Thrift Deposits
Pre-merger	2,023.5	1,083.9	1,658.7
Post-merger	2,529.8	1,330.4	2,025.9
Net Increase	506.3	246.5	340.2

Concentration Measures
(Case #2)

Schedule B

Four Firm Deposit Concentration Ratio *
(As of June 30, 1986)

	Excluding Thrift Deposits	Including 100% of Thrift Deposits	Including 50% of Thrift Deposits
Pre-merger	84.9%	59.2%	69.7%
Post-merger	90.3%	65.3%	74.1%
Net Increase	5.4%	6.1%	4.4%

**Includes deposits for Signet Bank/Virginia, Central Fidelity, N.A., Crestar, and Sovran, N.A.*

In Schedule A, excluding the deposits of thrift institutions resulted in a post merger HHI of 2,529.8 points and a net increase of 506.2 points. Utilizing the Department of Justice revised merger guidelines, this acquisition would have been contested, and most likely declined, on the basis of the HHI significantly exceeding 1800 points and the net increase exceeding 200 points. The high concentration and dominance of this market by these combined institutions is further emphasized by Schedule B and the Four Firm Deposit Concentration Ratio of 90.3%. The remaining 9.7% of the market is shared by ten (10) other commercial banking institutions.

The significance of thrift market share in the Richmond, Virginia RMA is reflected in the above schedules at both the 50% and 100% levels. In aggregate, thrifts controlled 30.4% of the total deposits held by thrifts and commercial banks. In the proposed merger of Signet and CFB, the use of 100% of the thrift deposits decreased the post-merger HHI to 1,330.4 points. This is reflective of a moderately concentrated market. Although the net increase was 246.5 points, contestment by the Department of Justice generally requires that the net increase exceed 200 points <u>and</u> the post-merger HHI exceed 1800 points. The consideration of the market share held by thrifts in this proposed merger transaction is quite significant as the post-merger HHI was diluted by 47% when full acknowledgement was given to thrift deposits.

In summary, the implication of thrift institutions as direct competitors of commercial banks for common market share of depositor's dollars, further suggests that commercial banking may no longer be a "separate and distinct line of commerce." As demonstrated above, the Richmond, Virginia RMA is highly competitive financial market. The inclusion of thrifts in merger considerations can have profound market implications. Specifically, the size of the deposit base controlled by Richmond, Virginia RMA thrift institutions gives them the ability to compete with commercial banks.

Conclusion

As indicated above, inclusion 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 concentration in the banking industry 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 the analysis of market concentration. The finding suggests some efficiencies may be gained by bank regulators by consolidating merger guidelines on the amount of thrift deposits to consider in competition analysis. Further, the empirical evidence verifies the contention of other research that the inclusion of thrifts' deposits in competition analysis reduce the likelihood of regulatory barriers to bank acquisitions. 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.

Recent developments with respect to the overall health of the thrift industry have hastened the removal of the concept of commercial banking being a "separate line of commerce" from thrift institutions. The problems currently affecting the thrifts are undermining confidence in the entire financial system. John Medlin, Chairman and CEO of First Wachovia Corporation, has called for a move to one financial system, including banks and thrifts, with "better regulatory discipline, better management discipline, and more private capital to buffer risk." In addition, numerous discussions have evolved towards merging the FDIC and FSLIC insurance funds. As time evolves, it will be noted that the regulatory barriers that once separated commercial banks from thrift institutions no longer exist.

This study has demonstrated on a case-by-case analysis the benefits of including thrift institutions as competitors in commercial bank mergers and acquisitions. Case #1, resulting in the formation of Sovran Banks, N.A., demonstrated that the divestiture of branches were unnecessary when any level of thrift deposits were used in market concentration calculations. Moreover, the use of the 1984 revised merger guidelines published by the Department of Justice revealed that the divestitures probably would not have been required even if thrift institutions were not considered. In Case #2, it was demonstrated that in markets where banking is highly concentrated and thrifts are competitive in size and number, a concentration index combining banks and thrifts will be significantly lower, even if the merging institutions have a dominant portion of the commercial banking market.

The inclusion of thrifts in market concentration analysis eliminates a wasteful separation of markets and enhances the prospects for a more competitive financial marketplace. 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, Virginia RMA, as it is in other markets. This should encourage bankers to continue their efforts to have bank regulators recognize the thrift industry as a full-fledged competitor in all financial markets.