

THRIFT COMPETITION: DOES IT MATTER?

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Recent questions and comments received by this Bank from bankers, attorneys and consultants have indicated a keen interest in the definition and structure of large banking markets in the Fifth District. These individuals seldom express an interest in the fine points of economic theory. They do seem vitally concerned with the practical aspects of banking market analysis including the role of thrift institutions.

Awareness of thrift competition in some markets may extend well beyond the Supreme Court's landmark *U. S. vs. Philadelphia National Bank* decision in 1963, which established that the antitrust laws were applicable to the banking industry. The Philadelphia National case also established that commercial banking constituted a unique cluster of financial services (the line of commerce or product) which was provided in a local area, the geographic market. There was no place for thrifts in this market structure as defined by the courts.

Twenty-three years after the precedent setting Philadelphia National Bank decision, this article briefly outlines the current approach to competitive analysis as applied to bank acquisitions. Then it proceeds to a detailed examination of the ten largest banking markets in the Fifth District. Thrift competition is recognized as a major factor in each of these markets. It is also evident that the current regulatory framework presents no barrier to most potential acquisitions in these areas, whether or not thrifts are included in the analysis.

Geographic Market

Since Philadelphia National, the Supreme Court has consistently maintained that the relevant geographic market is the local banking market. This concept has been interpreted as implying that the banking requirements of the locally limited customer, especially the locally limited borrower, are significant determinants in geographic market definition. In

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economic terms, the limit of the geographic market is related to the marginal cost which a locally limited customer might incur if he attempted to obtain banking services at some distance from his residence or place of work. Clearly there is a practical limit in terms of time, effort or expense that would preclude most individuals and small commercial enterprises from pursuing banking services at distant locations. Recent concerns expressed by consumers with respect to "lifeline" or "basic" banking services have indicated that many persons do not have access to a national financial services market and, in fact, are highly dependent on local banking services.

Court decisions since 1963 have continued to emphasize the importance of the local banking market. There also has been increasing recognition that a banking market may cross political boundaries. While this possibility had been recognized at times in the past, it became more firmly established with the Board of Governors' (Board) determination in 1980 that the Ranally Metro Area (RMA)¹ often provides a reasonable approximation of the banking market. RMAs typically are growth areas containing expanding banking markets. 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.

A consistent pattern of decisions by the various regulatory agencies and the courts has established that the geographic definition of a local banking market as set forth by the U. S. Supreme Court in the Philadelphia National case has not been influenced materially by subsequent economic, technological or legislative developments. These same three processes have tended to alter the applicable definition of the product market.

¹An 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 percent of the population or 20 percent of its labor force commutes to the central city and its adjacent built-up areas" 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.

Product Market

What is the unique cluster of banking services that the Supreme Court first determined represents a product market? The essential services include the acceptance of demand deposits and the granting of commercial loans. One need not provide the complete assortment of products offered by a full service bank in order to comply with the Court's requirements.

The thrift industry, specifically savings and loan associations, obtained access to demand deposits (NOW accounts) with the enactment of the Depository Institutions Deregulation and Monetary Control Act of 1980 and began to formally participate in commercial lending with the passage of the Garn-St Germain Act in 1982. Credit unions also can provide NOW accounts but most CUs in this District continue to accommodate a restricted membership base which is not comparable to the broad market segment served by commercial banks and S&Ls. Adherence to the usual requirement that membership in a credit union is a necessary qualification for borrowing almost automatically blocks most forms of commercial lending activity for CUs.

It is quite possible that further technological developments and legislative changes will admit additional participants to the product market, including such closely related suppliers of financial services as consumer finance companies, brokerage firms and large nationwide retailing establishments such as Sears. Regardless of the changes which may take place in the list of competitors, it is the product definition and not the geographic market which is most immediately affected.

Total Deposits as a "Product"

The Court's emphasis on deposit services is reflected in the way banking analysts measure all product offerings. It has become customary to use total deposits as a proxy for many forms of competition in the banking market. Total deposits are taken to be representative of most of the services customarily attributed to the liability side of a bank's balance sheet, although they do not address directly the products in the asset category. Moreover, deposit data meet a crucial criterion for practical analysis in that they are the only measures readily available. By contrast, asset data comparable to the Summary of Deposits information compiled by the Federal Deposit Insurance Corporation for banks and by the Federal Home Loan Bank Board for thrifts are simply not available.

Currently there seems to be general agreement among the various federal regulatory agencies and the U. S. Department of Justice that thrifts are significant competitors of commercial banks. There are differing views, however, concerning the precise degree of competition between thrifts and commercial banks. In other words, there is evidence that thrifts may be somewhat reluctant to use their recently approved powers, particularly when it comes to making commercial loans. In the absence of information effectively documenting the competitive activities of thrift institutions, the Board usually will include 50 percent of the deposits held by thrifts as a component of the relevant banking market. This adjustment is tacitly acknowledged to represent a rule of thumb that may be revised when circumstances warrant.

The Justice Department takes a somewhat different tack by dividing markets into wholesale and retail segments. One hundred percent of thrift deposits is normally included in the retail (consumer) market as defined, while in general only 20 percent of thrift deposits is attributed to the wholesale (commercial) market because of the limited ability of thrifts to engage in commercial lending. It should be noted that Justice and the FDIC tend to place greater emphasis on deposits of individuals, partnerships and corporations (IPC deposits) than on total deposits when computing market shares.

Measuring Competition in the Market

The concepts of geographic market and the relevant product market say nothing about the degree of competition in the market. Traditionally the degree of competition in banking markets has been measured by deposit concentration ratios—typically the three-firm or the four-firm deposit concentration ratios. As an example, if the four largest banks in a market control an aggregate of 80 percent of deposits in the area, the four-firm concentration ratio will be 80 percent. This piece of information does not tell us whether the remaining 20 percent is held by one bank or a hundred. The original Department of Justice guidelines published in 1968 were based on concentration ratios.

An alternative and perhaps more informative means of measuring concentration is represented by the Herfindahl Index (HI). The HI takes its name from Orris Herfindahl, a researcher in the early 1950s who employed the measure in his studies of concentration in the steel industry. At approximately

the same time Alfred Hirschman independently developed a similar measurement and the HI therefore is often identified as the Herfindahl-Hirschman Index (HHI) .

The HHI may be defined simply as the sum of the squares of the respective market shares.² For example, an isolated market with only one vendor holding one hundred percent of the market would exemplify complete monopoly. One hundred percent expressed as a decimal equivalent of 1.00 multiplied by itself (1.00 x 1.00) would remain one or unity which is the theoretical upper limit of the HHI.

As a more realistic illustration, a bank controlling 50 percent of a market would have an HHI of .2500 (.50² or .50 x .50) and its competitor with 25 percent would indicate an HHI of .0625 (.25²). Allocating the remaining market share of 25 percent to a third bank would yield a market HHI of .3750 (.2500 + .0625 + .0625). It has become accepted practice to convert the decimals into a whole number by multiplying by 10,000. A feature of the HHI is that it disproportionately weights the larger participants in the market and may give a more accurate indication of relative competitive ability.

Justice Guidelines

The HHI acquired official status when the U. S. Department of Justice published its revised "Merger Guidelines" on June 14, 1982. The guidelines divide markets into three broad categories. Those with a post-merger HHI below 1000 are classified as un-concentrated, a post-merger HHI between 1000 and 1800 is moderately concentrated and anything over 1800 is considered highly concentrated. Merger-induced **changes** in the HHI are at least as important as the static level of the index. With respect to such changes, Justice notes that "the department is likely to challenge mergers in this region that produce an increase in the HHI of 100 points or more."

The guidelines recently have been further liberalized with respect to bank consolidations. In an advisory opinion to the Comptroller concerning the acquisition of Brookhaven Bank and Trust Company by First National Bank of Jackson, Jackson, Mississippi, Justice has indicated that it will not challenge a bank merger unless two conditions are met. The

²The HHI may be represented mathematically as $\sum_{i=1}^n MS_i^2$, where MS_i is the market share of bank i and n is the number of banks in the market.

market after consummation of the merger must have an HHI of 1800 or more *and* the rise in the HHI attributed to the merger must equal or exceed 200 points. This expansion of the guidelines constitutes implicit recognition as described by Justice that there are other near-bank competitors in the typical banking market which cannot be evaluated adequately from readily available information.

The guidelines provide some of the formal dimensions of the legal barriers which circumscribe bank acquisitions. These official rules are particularly interesting when applied to the ten largest banking markets in the District.

Fifth District Banking Markets

Table I lists the top ten banking markets in the Fifth District arrayed in descending order of total deposits from the Washington (D. C.) RMA, the largest, to the Charleston, West Virginia market consisting of Kanawha County and Putnam County, West Virginia. Thrifts are a significant factor in each of these ten markets ranging from 51.0 percent of combined deposits in the Greenville, South Carolina market to 15.4 percent in the Charleston, West Virginia market on June 30, 1983. The Charleston and the Charlotte, North Carolina markets are the only areas among the top ten where thrifts control less than 25 percent of aggregate deposits.

Thrifts managed to maintain and slightly improve their share of deposits in the universe of ten markets between June 30, 1983 and mid-year 1984 (the most recent period for which data are available) as illustrated by the 37.7 percent weighted average in Table II compared with the 37.6 percent average of Table I. Thrift market share rose from 15.4 percent to 15.9 percent in the Charleston market but declined slightly in Greenville from 51.0 percent to 50.1 percent. The remaining markets where the thrifts' share declined over the year included Richmond, Virginia ; Charlotte, North Carolina ; Norfolk-Portsmouth, Virginia ; Winston-Salem, North Carolina ; Wake County, North Carolina and the remainder of the Raleigh RMA. These decreases were effectively offset by incremental shifts in favor of the thrifts in the markets of Washington, D. C. ; Baltimore, Maryland ; and Columbia, South Carolina. This performance is consistent with the view that where thrifts have been strong historically, they remain viable competitors. The slight changes in market share data show, however, that thrifts have not gained an appreciable competitive advantage relative to commercial banks in these markets.

Table I
TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1983

(Dollar amounts in thousands)

Markets	Banks	Thrifts	Banks and Thrifts	Thrifts as a percent of total market
Washington, D. C. RMA	\$17,246,510	\$11,869,032	\$29,115,542	40.8
Baltimore, Md. RMA	9,025,600	5,854,700	14,880,300	39.3
Richmond, Va. RMA	3,954,119	1,976,454	5,930,573	33.3
Charlotte, N. C. RMA	3,884,110	1,120,048	5,004,158	22.4
Norfolk-Portsmouth, Va. RMA and Currituck County, N. C.	2,352,062	1,913,804	4,265,866	44.8
Columbia, S. C. RMA	1,729,697	1,015,453	2,745,150	37.0
Greenville, S. C. RMA	1,157,771	1,204,253	2,362,024	51.0
Wake County, N. C. and remainder of Raleigh RMA	1,635,471	608,773	2,244,244	27.1
Winston-Salem, N. C. RMA	1,513,587	720,161	2,233,748	32.2
Kanawha County and Putnam County, W. Va. (Charleston RMA)	<u>1,698,035</u>	<u>308,825</u>	<u>2,006,860</u>	15.4
Total	\$44,196,962	\$26,591,503	\$70,788,465	
Ten Market Weighted Average				37.6

Table II
TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1984

(Dollar amounts in thousands)

Markets	Banks	Thrifts	Banks and Thrifts	Thrifts as a percent of total market
Washington, D. C. RMA	\$20,210,457	\$14,230,126	\$34,440,583	41.3
Baltimore, Md. RMA	9,997,913	7,157,305	17,155,218	41.7
Richmond, Va. RMA	4,595,285	2,100,330	6,695,615	31.4
Charlotte, N. C. RMA	4,356,592	1,206,484	5,563,076	21.7
Norfolk-Portsmouth, Va. RMA and Currituck County, N. C.	3,209,927	2,175,881	5,385,808	40.4
Columbia, S. C. RMA	1,802,574	1,115,377	2,917,951	38.2
Winston-Salem, N. C. RMA	2,064,898	783,401	2,848,299	27.5
Wake County, N. C. and remainder of Raleigh RMA	1,966,015	675,131	2,641,146	25.6
Greenville, S. C. RMA	1,302,602	1,308,265	2,610,867	50.1
Kanawha County and Putnam County, W. Va. (Charleston RMA)	<u>1,787,896</u>	<u>337,621</u>	<u>2,125,517</u>	15.9
Total	\$51,294,159	\$31,089,921	\$82,384,080	
Ten Market Weighted Average				37.7

Concentration varies widely among the top ten markets as depicted in Table III. The HHIs for these markets range from a low of just 682 for the narrowly defined market consisting of banks only in Washington to a high of 4538 in the Winston-Salem area. Other highly concentrated markets with an HHI above 1800 include Richmond, Charlotte, Norfolk, Portsmouth and Columbia.

Expansion of the product market to include 50 percent of thrift deposits in the area brings about a striking decrease in the perceived level of concentration. After this adjustment the HHI would range from 414 for Washington to 3282 for Winston-Salem. The only market other than Winston-Salem which would remain highly concentrated under this definition is the Charlotte market with an HHI of 2231. The addition of just half of the deposits attributable to thrifts has lowered the indicated Herfindahl by 203 points in the Charleston market and by various amounts in the other markets ranging upward to an impressive 1256 in the Winston-Salem area. These substantive reductions in market concentration represent empirical evidence that as competitors thrifts indeed do matter.

The last column of Table III shows the effect of adding 20 percent of thrift deposits to the market. This computation approximates the weighting which Justice has indicated it is willing to consider when

evaluating the commercial banking market. Even with this relatively small weight, thrift competition is still sufficient to remove most markets from the highly concentrated category. Charlotte and Winston-Salem again are the only markets which remain concentrated after this adjustment. These results constitute evidence that concentration is simply not a material problem in most of the top ten banking markets in the District once even the slightest weight is given to deposits of thrift institutions.

While space considerations preclude a detailed look at each of the ten large markets, one can examine more closely the market for Washington, D. C. and the adjacent portions of Maryland and Virginia. As mentioned previously, the Washington RMA is by far the largest and least concentrated banking market in the District.

Table A of the Appendix lists each of the 71 banks which compete in the Washington banking market. On June 30, 1984 these organizations operated 917 banking offices holding total deposits of \$20.2 billion. The aggregate HHI was a remarkably low 682 with the contribution of each institution to that overall figure apparent from the data. The modest level of concentration was further confirmed by the three- and four-bank deposit concentration ratios of only 34.4 percent and 43.6 percent, respectively.

Table B shows the dramatic effect of adding all

Table III
TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1984

Markets	Herfindahl Index-Banks Only	Above (+) or Below (-) the 1800 Guideline	Herfindahl Index-Banks and Thrifts	Herfindahl Index-Banks and 50 percent of Thrift Deposits	Herfindahl Index-Banks and 20 percent of Thrift Deposits
Washington, D. C. RMA	682	- 1118	337	414	533
Baltimore, Md. RMA	1242	- 588	510	709	958
Richmond, Va. RMA	1980	+ 180	1055	1355	1671
Charlotte, N. C. RMA	2858	+ 1058	1836	2231	2571
Norfolk-Portsmouth, Va. RMA and Currituck County, N. C.	2046	+ 246	981	1241	1609
Columbia, S. C. RMA	2059	+ 259	1126	1331	1659
Winston-Salem, N. C. RMA	4538	+ 2738	2611	3282	3936
Wake County, N. C. and remainder of Raleigh RMA	1425	- 375	999	1107	1261
Greenville, S. C. RMA	1601	- 199	1368	1141	1218
Kanawha County and Putnam County, W. Va. (Charleston RMA)	1405	- 395	1093	1202	1310

thrift deposits in the area to the market. Under this scenario some 122 banks and thrifts operate 1323 offices. Collectively they hold \$34.3 billion in deposits. The HHI has been halved to 337, while the respective three-bank and four-bank deposit concentration ratios have been reduced correspondingly to 20.5 percent and 27.0 percent from the year earlier levels of 34.4 percent and 43.6 percent. The hypothetical merger of the two largest institutions in this expanded product market would add less than 100 points to the HHI.

Although it is not shown here, an alternative market definition to include 50 percent of thrift deposits has been computed by the author.³ This arbitrary adjustment reduces the HHI to 414. The merger of the two largest institutions as defined would now add about 149 points to the HHI. This change, of course, would not conflict in any way with applicable guidelines.

Also not shown is the author's reconfiguration of the data to determine the effect of reducing thrift deposits to a mere 20 percent of the deposits reported by these institutions. The HHI rises moderately to 533 after this adjustment. Combining the two largest institutions in the market would increase the indicated HHI by approximately 209. An increase of this magnitude evidently would be thoroughly acceptable under published guidelines in such an unconcentrated market.

Summary

Thrifts and banks compete in local banking markets with product lines that are similar but not identical between the two industries. Competition among the firms in a market is measured by deposit concentration ratios and most recently by HHIs. The HHI provides the basis for the Department of Justice's Merger Guidelines.

A review of the top ten banking markets in the Fifth District has demonstrated that most of these markets are either unconcentrated or near the lower boundary of the moderately concentrated range after giving some weight to the presence of thrift institutions. The relatively low concentration levels indicate that existing guidelines do not present a significant barrier to bank acquisitions in these communities.

³ Unpublished market tables for the markets cited in this article are available from the author upon request.

References

Austin, Douglas V. "Defining the Market Area of a Bank." *Bankers Magazine* 152 (Spring 1969) : 64-77.

- Baxter, Nevins D., and John D. Hawke, Jr. "Can the Banking Agencies Predict Market Entry?" *Issues in Bank Regulation* 6 (Autumn 1982) : 38-44.
- Burke, Jim. *Antitrust Laws, Justice Department Guidelines, and the Limits of Concentration in Local Banking Markets*. Staff Studies 138. Washington : Board of Governors of the Federal Reserve System, 1984.
- Daskin, Alan J. "Aggregate Concentration and Geographic Diversification." *Journal of Economics and Business* 37 (August 1985) : 237-51.
- Decision Research Sciences, Inc. *1984-1985 Branch Directory and Summary of Deposits*. Blue Bell, Pa., 1984.
- Di Clemente, John J., and Diana Alamprese Fortier. "Bank Mergers Today: New Guidelines! Changing Markets." Federal Reserve Bank of Chicago, *Economic Perspectives* (May-June 1984), pp. 3-14.
- . "Including Thrifts in Bank Merger Analysis." Federal Reserve Bank of Chicago, *Economic Perspective* (July-August 1983), pp. 3-16.
- Federal Deposit Insurance Corporation. *Data Book-Operating Banks and Branches*. June 30, 1984.
- Guerin-Calvert, Margaret E. "The 1982 Department of Justice Merger Guidelines : Applications to Banking Mergers." *Issues in Bank Regulation* 6 (Winter 1983) : 18-25.
- Heggstad, Arnold A., and John J. Mingo. "The Competitive Condition of U. S. Banking Markets and the Impact of Structural Reform." *Journal of Finance* 32 (June 1977) : 649-62.
- Horowitz, Ira. "Market Definition, Market Power, and Political Competition." *Quarterly Review of Economics and Business* 22 (Autumn 1982) : 23-42.
- . "Theoretical Review." Federal Reserve Bank of Atlanta. *Economic Review* (April 1982). pp. 30-34.
- Kaufman, George G.; Larry Mote; and Harvey Rosen; "Product Lines, Geographic Markets." *Bankers Monthly* 94 (May 15, 1982) : 19-23.
- King, B. Frank. "New Tests of Banking Market Limits." Federal Reserve Bank of Atlanta, *Monthly Review* 62 (March 1977) : 39-40.
- Rand McNally & Company. *Commercial Atlas and Marketing Guide*. Chicago: Rand McNally & Company, 1985.
- Rhoades, Stephen A. "Merger Guidelines: Their Purpose, Construction, and Implementation." *Bankers Magazine* 166 (January-February 1983) : 28-33.
- . "National and Local Market Banking Concentration in an Era of Interstate Banking." *Issues in Bank Regulation* 8 (Spring 1985) : 29-36.
- Salley, Charles D. "Uniform Price and Banking Market Delineation." Federal Reserve Bank of Atlanta, *Monthly Review* 60 (June 1976) : 86-93.
- Wolken, John. *Geographic Market Delineation: A Review of the Literature*. Staff Studies 140. Washington: Board of Governors of the Federal Reserve System, 1984.
- Watro, Paul R. "Geographic Banking Markets." Federal Reserve Bank of Cleveland, *Economic Commentary*, September 12, 1983.
- Welch, Patrick J. "Concentration in Local Commercial Banking Markets: A Study of the Eighth Federal Reserve District." Federal Reserve Bank of St. Louis, *Review* 65 (October 1983) : 15-21.
- Whitehead, David D. "Relevant Geographic Banking Markets: How Should They be Defined." Federal Reserve Bank of Atlanta, *Economic Review* 65 (January-February 1980) : 20-28.
- Yanni, Joseph A. "Managing the Competitive Factors in a Merger." *Issues in Bank Regulation* 7 (August 1983) : 7-10.

APPENDIX

These market tables have been compiled from data sources which are generally reliable but have not proved to be infallible. If any reader has reason to believe that the information presented for his or her organization is not reported accurately, your comments directed to the author at the address shown on the back cover of

this publication would be most welcome. Your thoughts concerning the usefulness of the data in your activities would also be helpful in providing guidance with respect to information for other markets which might be published in the future.

Market Table A
 WASHINGTON RMA BANKING MARKET
 June 30, 1984
 (dollar amounts in thousands)

Rank	Bank	Offices	Percent of Total Offices	Total Deposits	Percent of Total Deposits in Market	Herfindahl Index	Cumulative Herfindahl Index
1	The Riggs National Bank of Washington, D. C.	30	3.27	\$ 2,469,801	12.22	149.34	149.34
2	Credit and Commerce American Holdings, NV	92	10.03	2,255,041	11.16	124.50	273.83
3	American Security Bank, National Association	30	3.27	2,230,797	11.04	121.83	395.67
4	First Virginia Bank	64	6.98	1,853,468	9.17	84.10	479.77
5	Suburban Bank	63	6.87	1,704,984	8.44	71.17	550.94
6	Sovran Bank	74	8.07	1,076,246	5.33	28.36	579.30
7	The National Bank of Washington	22	2.40	895,641	4.43	19.64	598.94
8	Citizens Bank & Trust Company of Maryland	81	8.83	888,395	4.40	19.32	618.26
9	Maryland National Bank	75	8.18	830,354	4.11	16.88	635.14
10	United Virginia Bank	37	4.03	807,750	4.00	15.97	651.11
11	NS & T Bank, National Association	17	1.85	618,950	3.06	9.38	660.49
12	Bank of Virginia	26	2.84	462,065	2.29	5.23	665.72
13	The First National Bank of Maryland	33	3.60	361,655	1.79	3.20	668.92
14	Equitable Bank, National Association	33	3.60	286,954	1.42	2.02	670.94
15	District of Columbia National Bank, Washington	5	0.55	250,815	1.24	1.54	672.48
16	Dominion Bank of Northern Virginia, National Association	28	3.05	248,653	1.23	1.51	673.99
17	Madison National Bank	9	0.98	229,671	1.14	1.29	675.28
18	Mercantile Bankshares Corporation	16	1.74	203,077	1.00	1.01	676.29
19	Security National Bank	9	0.98	195,529	0.97	0.94	677.23
20	Union Trust Company of Maryland	17	1.85	158,015	0.78	0.61	677.84
21	Central Fidelity Bank	16	1.74	156,533	0.77	0.60	678.44
22	Burke & Herbert Bank & Trust Company	7	0.76	142,154	0.70	0.49	678.93
23	Sandy Springs National Bank and Savings Institutions	7	0.76	130,210	0.64	0.42	679.35
24	State National Bank of Maryland	9	0.98	114,083	0.56	0.32	679.67
25	Bank of Bethesda	10	1.09	102,668	0.51	0.26	679.93
26	Guaranty Bank & Trust Company	5	0.55	92,050	0.46	0.21	680.13
27	The Central National Bank of Maryland	8	0.87	92,036	0.46	0.21	680.34
28	The Bank of Damascus	4	0.44	91,595	0.45	0.21	680.55
29	The McLean Bank	4	0.44	83,838	0.41	0.17	680.72
30	McLachlen National Bank	6	0.65	80,710	0.40	0.16	680.88
31	Industrial Bank of Washington	3	0.33	65,418	0.32	0.10	680.98
32	United Bank & Trust Company of Maryland	8	0.87	61,194	0.30	0.09	681.07
33	The George Mason Bank	2	0.22	60,931	0.30	0.09	681.17
34	Bank of Southern Maryland	4	0.44	59,667	0.30	0.09	681.25
35	The Fauquier National Bank of Warrenton	3	0.33	55,075	0.27	0.07	681.33
36	United National Bank of Washington	5	0.55	53,753	0.27	0.07	681.40
37	National Bank of Commerce, Washington, D. C.	3	0.33	53,507	0.26	0.07	681.47
38	The Bank of Baltimore	3	0.33	52,118	0.26	0.07	681.53
39	The National Capital Bank of Washington	2	0.22	48,277	0.24	0.06	681.59
40	First Commercial Bank	1	0.11	42,762	0.21	0.04	681.64
41	The Peoples National Bank of Warrenton	2	0.22	37,040	0.18	0.03	681.67
42	Maryland Bank & Trust Company	4	0.44	32,877	0.16	0.03	681.70
43	The Business Bank	1	0.11	32,866	0.16	0.03	681.72
44	Capital Bank, National Association	1	0.11	32,094	0.16	0.03	681.75
45	Century National Bank	1	0.11	31,101	0.15	0.02	681.77
46	Enterprise Bank Corporation	2	0.22	28,101	0.14	0.02	681.79
47	First Women's Bank of Maryland, Inc.	2	0.22	26,034	0.13	0.02	681.81
48	Bank of Alexandria	1	0.11	24,837	0.12	0.02	681.82
49	Heritage International Bank	1	0.11	23,736	0.12	0.01	681.84
50	The Palmer National Bank	1	0.11	22,116	0.11	0.01	681.85
51	Continental Bank & Trust Company	2	0.22	22,020	0.11	0.01	681.86
52	American Indian National Bank	1	0.11	21,427	0.11	0.01	681.87
53	Independent Bank	2	0.22	20,474	0.10	0.01	681.88
54	The Women's National Bank	3	0.33	18,333	0.09	0.01	681.89
55	First Continental Bank of Maryland	2	0.22	17,957	0.09	0.01	681.90
56	Jefferson Bank & Trust Company	1	0.11	17,366	0.09	0.01	681.91
57	Provident Bank of Maryland	1	0.11	17,300	0.09	0.01	681.91
58	National Enterprise Bank	1	0.11	16,867	0.08	0.01	681.92
59	Farmers & Mechanics National Bank	1	0.11	13,485	0.07	0.00	681.92
60	Arlington Bank	1	0.11	10,821	0.05	0.00	681.93
61	Peoples Bank of Danville	2	0.22	10,416	0.05	0.00	681.93
62	Prince William Bank	3	0.33	10,288	0.05	0.00	681.93
63	Farmers National Bank of Maryland	1	0.11	8,196	0.04	0.00	681.93
64	Marshall National Bank and Trust Company	1	0.11	7,733	0.04	0.00	681.94
65	Universal Bank	1	0.11	7,423	0.04	0.00	681.94
66	The Peoples Bank of Stafford	2	0.22	7,399	0.04	0.00	681.94
67	The National Bank of Fredericksburg	1	0.11	6,360	0.03	0.00	681.94
68	Community Bank & Trust Company of Virginia	1	0.11	5,796	0.03	0.00	681.94
69	The Farmers & Merchants National Bank of Hamilton	1	0.11	5,491	0.03	0.00	681.94
70	Eldridge National Bank	1	0.11	4,218	0.02	0.00	681.94
71	Commercial & Farmers Bank	1	0.11	3,845	0.02	0.00	681.94
Total Market		917	100.00	\$20,210,457	100.00	681.94	681.94

The three-bank concentration ratio is 34.42 percent.

The four-bank concentration ratio is 43.59 percent.

Market Table B
WASHINGTON RMA BANK/THRIFT MARKET

June 30, 1984

(dollar amounts in thousands)

Rank	Bank	Offices	Percent of Total Offices	Total Deposits	Percent of Total Deposits in Market	Herfindahl Index	Cumulative Herfindahl Index
1	The Riggs National Bank of Washington D. C.	80	2.27	\$ 2,469,801	7.17	51.43	51.43
2	Perpetual American Bank, F.S.B.	51	3.85	2,324,583	6.75	45.56	96.98
3	Credit and Commerce American Holdings, NV	92	6.95	2,255,041	6.55	42.87	139.85
4	American Security Bank, National Association	30	2.27	2,230,797	6.48	41.95	181.81
5	First Virginia Bank	64	4.84	1,853,468	5.38	28.96	210.77
6	Suburban Bank	63	4.76	1,704,984	4.95	24.51	235.28
7	Chevy Chase Savings and Loan, Inc.	16	1.21	1,389,492	4.03	16.28	251.55
8	Sovran Bank	74	5.59	1,076,246	3.12	9.77	261.32
9	The National Bank of Washington	22	1.66	895,641	2.60	6.76	268.08
10	Citizens Bank & Trust Company of Maryland	81	6.12	888,395	2.58	6.65	274.74
11	Maryland National Bank	75	5.67	830,354	2.41	5.81	280.55
12	Columbia First Federal Savings and Loan	15	1.13	816,579	2.37	5.62	286.17
13	United Virginia Bank	37	2.80	807,750	2.35	5.50	291.67
14	National Permanent Bank, F.S.B.	15	1.13	759,752	2.21	4.87	296.54
15	Standard Federal Savings and Loan Association	19	1.44	697,992	2.03	4.11	300.65
16	Continental Federal Savings and Loan Association	26	1.97	690,425	2.00	4.02	304.66
17	Dominion Federal Savings and Loan Association	15	1.13	641,610	1.86	3.47	308.13
18	NS&T Bank, National Association	17	1.28	618,950	1.80	3.23	311.36
19	Government Services Savings and Loan, Inc.	7	0.53	616,374	1.79	3.20	314.57
20	Washington Federal Savings and Loan Association	15	1.13	616,303	1.79	3.20	317.77
21	John Hanson Savings and Loan, Inc.	9	0.68	515,273	1.50	2.24	320.01
22	Bank of Virginia	26	1.97	462,065	1.34	1.80	321.81
23	Community Savings and Loan, Inc.	6	0.45	390,629	1.13	1.29	323.09
24	Maryland Federal Savings and Loan Association	15	1.13	362,841	1.05	1.11	324.20
25	The First National Bank of Maryland	33	2.49	361,655	1.05	1.10	325.31
26	Metropolitan Federal Savings and Loan Association	21	1.59	343,358	1.00	0.99	326.30
27	First Federal Savings and Loan Association of Northern Virginia	11	0.83	308,841	0.90	0.80	327.10
28	Equitable Bank, National Association	33	2.49	286,954	0.83	0.69	327.80
29	Capital City Federal Savings and Loan Association	9	0.68	280,641	0.81	0.66	328.46
30	Suburban Savings and Loan Association	12	0.91	253,041	0.73	0.54	329.00
31	District of Columbia National Bank, Washington	5	0.38	250,815	0.73	0.53	329.53
32	Dominion Bank of Northern Virginia, National Association	28	2.12	248,653	0.72	0.52	330.05
33	Citizens Savings and Loan Association	15	1.13	247,674	0.72	0.52	330.57
34	Madison National Bank	9	0.68	229,671	0.67	0.44	331.02
35	Northern Virginia Savings and Loan Association	9	0.68	223,756	0.65	0.42	331.44
36	Friendship Savings and Loan, Inc.	3	0.23	223,067	0.65	0.42	331.86
37	First Maryland Savings and Loan Association, Inc.	3	0.23	216,145	0.63	0.39	332.25
38	Equitable Federal Savings and Loan Association	8	0.60	213,698	0.62	0.38	332.64
39	Mercantile Bankshares Corporation	16	1.21	203,077	0.59	0.35	332.98
40	Security National Bank	9	0.68	195,529	0.57	0.32	333.30
41	Home Federal Savings and Loan Association	6	0.45	185,531	0.54	0.29	333.60
42	Piedmont Federal Savings and Loan Association	5	0.38	183,676	0.53	0.28	333.88
43	McLean Savings and Loan Association	3	0.23	162,686	0.47	0.22	334.10
44	Union Trust Company of Maryland	17	1.28	158,015	0.46	0.21	334.32
45	Central Fidelity Bank	16	1.21	156,533	0.45	0.21	334.52
46	United Savings and Loan Association	6	0.45	142,471	0.41	0.17	334.69
47	Burke & Herbert Bank & Trust Company	7	0.53	142,154	0.41	0.17	334.86
48	Providence Savings and Loan Association	8	0.60	140,611	0.41	0.17	335.03
49	Sandy Spring National Bank and Savings Institutions	7	0.53	130,210	0.38	0.14	335.17
50	Annapolis Federal Savings and Loan Association	6	0.45	126,722	0.37	0.14	335.31
51	First American Savings and Loan Association	10	0.76	124,949	0.36	0.13	335.44
52	State National Bank of Maryland	9	0.68	114,083	0.33	0.11	335.55
53	First Federal Savings and Loan Association	9	0.68	107,297	0.31	0.10	335.65
54	Jefferson Savings and Loan Association	3	0.23	104,938	0.30	0.09	335.74
55	Bank of Bethesda	10	0.76	102,668	0.30	0.09	335.83
56	Guaranty Bank & Trust Company	5	0.38	92,050	0.27	0.07	335.90
57	The Central National Bank of Maryland	8	0.60	92,036	0.27	0.07	335.97
58	The Bank of Damascus	4	0.30	91,595	0.27	0.07	336.04
59	The McLean Bank	4	0.30	83,838	0.24	0.06	336.10
60	McLachlen National Bank	6	0.45	80,710	0.23	0.05	336.16
61	Loyola Federal Savings and Loan Association	7	0.53	78,743	0.23	0.05	336.21
62	Baltimore Federal Financial, F.S.A.,	10	0.76	65,747	0.19	0.04	336.24
63	Laurel Building Association of Prince George	4	0.30	65,640	0.19	0.04	336.28
64	Industrial Bank of Washington	3	0.23	65,418	0.19	0.04	336.32
65	Independence Federal Savings and Loan Association	4	0.30	64,957	0.19	0.04	336.35
66	Family Savings and Loan Association, a FS & LA	5	0.38	63,152	0.18	0.03	336.39
67	United Bank & Trust Company of Maryland	8	0.60	61,194	0.18	0.03	336.42
68	The George Mason Bank	2	0.15	60,931	0.18	0.03	336.45
69	Bank of Southern Maryland	4	0.30	59,667	0.17	0.03	336.48
70	Commonwealth Savings and Loan Association	2	0.15	55,796	0.16	0.03	336.51
71	The Fauquier National Bank of Warrenton	3	0.23	55,075	0.16	0.03	336.53
72	United National Bank of Washington	5	0.38	53,753	0.16	0.02	336.56
73	National Bank of Commerce, Washington, D. C.	3	0.23	53,507	0.16	0.02	336.58
74	First Commonwealth Savings Association	2	0.15	52,569	0.15	0.02	336.60
75	The Bank of Baltimore	3	0.23	52,118	0.15	0.02	336.63
76	Bay State Savings and Loan Association	1	0.08	50,719	0.15	0.02	336.65
77	The National Capital Bank of Washington	2	0.15	48,277	0.14	0.02	336.67
78	OBA Federal Savings and Loan Association	1	0.08	45,443	0.13	0.02	336.68
79	First Commercial Bank	1	0.08	42,762	0.12	0.02	336.70
80	First Florida Federal Savings Bank	1	0.08	40,516	0.12	0.01	336.71

(continued on next page)

Market Table B (continued)
WASHINGTON RMA BANK/THRIFT MARKET

June 30, 1984

(dollar amounts in thousands)

Rank	Bank	Offices	Percent of Total Offices	Total Deposits	Percent of Total Deposits in Market	Herfindahl Index	Cumulative Herfindahl Index
81	Suburban Federal Savings and Loan Assn. of Lanham	2	0.15	39,340	0.11	0.01	336.73
82	Liberty Savings and Loan Association	1	0.08	37,537	0.11	0.01	336.74
83	Vermont Federal Savings and Loan Association	1	0.08	37,528	0.11	0.01	336.75
84	The Peoples National Bank of Warrenton	2	0.15	37,040	0.11	0.01	336.76
85	Maryland Bank & Trust Company	4	0.30	32,877	0.10	0.01	336.77
86	The Business Bank	1	0.08	32,866	0.10	0.01	336.78
87	Capital Bank, National Association	1	0.08	32,094	0.09	0.01	336.79
88	Century National Bank	1	0.08	31,101	0.09	0.01	336.80
89	Tri-County Federal Savings and Loan Association	1	0.08	30,391	0.09	0.01	336.81
90	Enterprise Bank Corporation	2	0.15	28,101	0.08	0.01	336.81
91	First Women's Bank of Maryland, Inc.	2	0.15	26,034	0.08	0.01	336.82
92	First Federal of Maryland, F.S.A.	2	0.15	25,145	0.07	0.01	336.82
93	Bank of Alexandria	1	0.08	24,837	0.07	0.01	336.83
94	Heritage International Bank	1	0.08	23,736	0.07	0.00	336.83
95	Maximum Savings Association	1	0.08	22,480	0.07	0.00	336.84
96	The Palmer National Bank	1	0.08	22,116	0.06	0.00	336.84
97	Continental Bank & Trust Company	2	0.15	22,020	0.06	0.00	336.85
98	American Indian National Bank	1	0.08	21,427	0.06	0.00	336.85
99	Independent Bank	2	0.15	20,474	0.06	0.00	336.85
100	The Women's National Bank	3	0.23	18,333	0.05	0.00	336.86
101	First Continental Bank of Maryland	2	0.15	17,957	0.05	0.00	336.86
102	United Savings Association	1	0.08	17,700	0.05	0.00	336.86
103	Jefferson Bank & Trust Company	1	0.08	17,366	0.05	0.00	336.86
104	Provident Bank of Maryland	1	0.08	17,300	0.05	0.00	336.87
105	National Enterprise Bank	1	0.08	16,867	0.05	0.00	336.87
106	Prince George Federal Savings and Loan Association	1	0.08	13,491	0.04	0.00	336.87
107	Farmers & Mechanics National Bank	1	0.08	13,485	0.04	0.00	336.87
108	Arlington Bank	1	0.08	10,821	0.03	0.00	336.87
109	Peoples Bank of Danville	2	0.15	10,416	0.03	0.00	336.87
110	Prince William Bank	3	0.23	10,288	0.03	0.00	336.87
111	Farmers National Bank of Maryland	1	0.08	8,196	0.02	0.00	336.87
112	Marshall National Bank and Trust Company	1	0.08	7,733	0.02	0.00	336.88
113	American National Building and Loan Association	1	0.08	7,700	0.02	0.00	336.88
114	Universal Bank	1	0.08	7,423	0.02	0.00	336.88
115	The Peoples Bank of Stafford	2	0.15	7,399	0.02	0.00	336.88
116	The National Bank of Fredericksburg	1	0.08	6,360	0.02	0.00	336.88
117	Community Bank & Trust Company of Virginia	1	0.08	5,796	0.02	0.00	336.88
118	The Farmers & Merchants National Bank of Hamilton	1	0.08	5,491	0.02	0.00	336.88
119	Eldridge National Bank	1	0.08	4,218	0.01	0.00	336.88
120	Commercial & Farmers Bank	1	0.08	3,845	0.01	0.00	336.88
121	Fredericksburg Savings and Loan Association	1	0.08	2,829	0.01	0.00	336.88
122	Sunrise Federal Savings and Loan Association	1	0.08	1,748	0.01	0.00	336.88
Total Market		1323	100.00	\$34,440,583	100.00	336.88	336.88

The three-firm concentration ratio is 20.47 percent.

The four-firm concentration ratio is 26.95 percent.