IPC OR TOTAL DEPOSITS? THERE IS A DIFFERENCE!

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"This probably sounds like a basic question, but. . . ." Some variation of this introduction often is a prelude to a discussion of how to report bank concentration for bank merger or bank holding company application purposes. Other than applications to form one-bank holding companies, most applications to acquire banks or bank holding companies require information on market concentration. The prospective applicant usually knows about such things as market tables and Herfindahl-Hirschman Indices. The question is, should the market table be constructed from total deposits or IPC deposits?

Tactful attempts to explain that the Federal Reserve System prefers total deposits for purposes of competitive analysis tend to provoke the objection that "other agencies" emphasize IPC deposits. The caller is referring, of course, to the U. S. Department of Justice, the Office of the Comptroller of the Currency (OCC)[1] and the Federal Deposit Insurance Corporation (FDIC).

This article attempts to clarify the distinction between IPC deposits and total deposits. Then it will show the effect of using the alternative deposit definitions to measure concentration in selected Fifth District banking markets. The expanding role of thrift institutions as competitors of banks also will be discussed.

Deposits of Individuals, Partnerships and Corporations (IPC Deposits)

Normally the largest subset of a bank's deposits, this IPC category represents exactly what the name signifies. Most of the locally limited customers who provide a basis for the concept of a banking market are included here, although a large percentage of IPC deposits may be held by customers with access to national markets.

The most commonly used source of deposit information for specific banking markets is the Summary of Deposit data published annually by the FDIC. (This information is included in a publication entitled *Data Book-Operating Banks and Branches.)* One computes total IPC deposits for each institution by combining the two classifications of IPC Transaction Accounts and IPC Nontransaction Accounts for each geographic location.

Total Deposits

In addition to IPC deposits, total deposits encompass a variety of bank creditors who may not be effectively restricted to the local banking market. An important group of depositors, duly reported in the Summary of Deposits, are those holding "public funds" including federal, state and municipal governments. The deposits of these public bodies are often characterized as "political" deposits.

A reason for excluding governmental units from local banking markets is that they may have access to a national funds market. In practice, however, numerous state and local laws limit political deposits to the taxing jurisdiction and thus to specific banking markets. By contrast, large corporations often have far greater access to national markets through use of cash management services.

Other non-IPC categories not listed separately in the Summary of Deposits include deposits of foreign governments, commercial bank deposits, and certified and officers checks. Bank deposits are the major item in this group. While banks occasionally maintain correspondent relationships with competitors, self-interest determines that most accounts will be maintained with correspondent banks located outside the respondents' markets.

Basis for Determining Market Structure

As mentioned in the introduction, the Fed traditionally favors total deposits[2] when evaluating

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[1] Since 1985, the OCC has incorporated a "Quick Check Merger Screen" in its application process which defers to Federal Reserve market definitions. IPC deposit information must be included, however, as a part of all applications which fail to pass the initial screen for material competitive issues.

[2] A study prepared at the Board in 1965 based on data from the Distribution of Bank Deposits by Counties and Standard Metropolitan Areas for 1956 and 1960 concluded that concentration ratios computed from IPC deposits produced ". . . essentially the same results" as concentration ratios derived from total deposits [Flechsig, 1965].

structural relationships whereas the Department of Justice and other bank regulatory agencies prefer to use IPC deposits. This distinction may be more apparent than real in terms of practical results. As an example, the following section will show that in the top ten markets in the Fifth District concentrated markets remain concentrated whether classified by total deposits or IPC deposits. Unconcentrated markets on the basis of total deposits do not become concentrated when limited to IPC deposits.

The trend to include all or a portion of the deposits held by thrift institutions in banking markets, however, has the potential to modify some relationships as thrifts evolve toward becoming full competitors of banks. Correspondent banking currently is not a routine function of thrift institutions. Nor have thrifts developed the capital structures which would facilitate the ability to compete aggressively for public funds despite the removal of some legal barriers to such deposits in recent years. In fact, the Federal Home Loan Bank Board (FHLBB) does not even report IPC deposits for savings and loan associations. Any market table constructed from publicly available data must perforce focus on total deposits at thrifts.

Results in the Fifth District's Top Ten Markets

Non-IPC deposits are a comparatively small but material part of large banking markets in this District. Within a narrowly defined product definition limited to commercial banks, non-IPC deposits range from a low of 4.3 percent in the unconcentrated Washington, D. C., market to a high of 15.0 percent in the concentrated Richmond, Virginia, area with a weighted average for the ten markets of 7.7 percent (Table 1).

Recalling that thrifts report only total deposits, it follows that expansion of the product market to include thrifts would tend to reduce the relative significance of non-IPC deposits. Non-IPCs as a percent of aggregate bank and thrift deposits in the top ten markets range from 2.4 to 11.0 percent with a mean of 4.7 percent. Washington again has the smallest proportion with only 2.4 percent, but the greatest percentage of non-IPCs is now identified with the Winston-Salem, North Carolina, market at 11.0 percent (Table 2).

Table 1

TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1985

(Dollar amounts in thousands)

	Total Bank Deposits	Total Bank IPC Deposits	Non-IPC Deposits as a Percent of Total Deposits
Washington, D.C.	$22,172,280	$21,210,219	4.34
Baltimore, Maryland	11,547,840	10,608,132	8.14
Charlotte, North Carolina	5,266,793	4,811,986	8.64
Richmond, Virginia	5,067,217	4,304,988	15.04
Norfolk-Portsmouth, Virginia	3,682,253	3,379,413	8.22
Winston-Salem, North Carolina	2,596,404	2,214,065	14.73
Raleigh, North Carolina	2,202,738	2,026,739	7.99
Columbia, South Carolina	1,930,330	1,685,142	12.70
Charleston, West Virginia	1,880,521	1,764,152	6.19
Greenville, South Carolina	1,429,134	1,333,277	6.71
Total	$57,775,510	$53,338,113	7.68

Table 2

TOP TEN BANKING MARKETS

FIFTH DISTRICT

June 30, 1985

(Dollar amounts in thousands)

	BANKS AND THRIFTS		Non-IPC Deposits as a Percent of Total Deposits
	Total Deposits	Total IPC Deposits	
Washington, D.C.	$39,947,208	$38,985,147	2.41
Baltimore, Maryland	19,536,585	18,596,877	4.81
Charlotte, North Carolina	6,817,605	6,362,798	6.67
Richmond, Virginia	7,529,874	6,767,645	10.12
Norfolk-Portsmouth, Virginia	6,349,866	6,047,026	4.77
Winston-Salem, North Carolina	3,476,383	3,094,044	11.00
Raleigh, North Carolina	2,986,878	2,810,879	5.89
Columbia, South Carolina	3,142,144	2,896,956	7.80
Charleston, West Virginia	2,241,979	2,125,610	5.19
Greenville, South Carolina	2,841,265	2,745,408	3.37
Total	$94,869,787	$90,432,390	4.68

The market tables confirm that alignment of market structure often is not affected by the use of IPC deposits as an alternative to total deposits. But there are exceptions. For example, consider the Richmond, Virginia, market when all thrift deposits are included (Table 3). Here the four largest institutions are commercial banks. Now refer to Table 4 where the Richmond bank/thrift market structure is determined by total IPC deposits. Under this alternative, the first and second ranked banks in the area have swapped places and the four largest depository institutions now include a savings and loan association.

One usually constructs market tables for the purpose of measuring concentration in terms of deposit concentration ratios and the Herfindahl-Hirschman Index (HHI). The HHI may be defined simply as the sum of the squares of the respective market shares of all participants in the market. For example, to determine the contribution to the HHI by a bank with 12 percent of the deposits in a given market, simply multiply .12 times .12 times 10,000 which equals 144. Then add the comparable data computed for all other banks in the market to obtain the HHI. (See Tables 3 and 4 for practical illustrations of the technique.) Following the U. S. Department of Justice's publication in 1982 of its Merger Guidelines based on the HHI, this statistic has become a widely accepted measure of concentration. Justice's guidelines for bank acquisition permit an increase of 200 in a concentrated market's HHI which is equivalent to combining two banks with respective market shares of 10.0 percent.

As depicted in Table 5, calculation of the HHI on the basis of IPC deposits will reduce the indicated levels of concentration for the first nine markets in the District by amounts ranging from just one for Baltimore, Maryland, to 498 for the Winston-Salem, North Carolina, market. Note, however, that the HHI for the Greenville, South Carolina, market actually registered an increase of 44. By contrast, the ten-market average change in the HHI was a decrease of 78. This means that, on the average, two banks with respective market shares of 6.24 percent could merge in the composite market measured by IPC deposits without exceeding the HHI for the market based on total deposits.

Adding thrift deposits to the markets reduces absolute levels of concentration, but deletion of

Table 3

RICHMOND, VA, RMA BANK/THRIFT MARKET

June 30, 1985

(Dollar amounts in thousands)

Rank	Bank	Total Deposits	Percent of Total Deposits in Market	Herfindahl-Hirschman Index	Cumulative Herfindahl-Hirschman Index
1	United Virginia Bank	$1,372,240	18.22	332.11	332.11
2	Bank of Virginia	1,216,014	16.15	260.80	592.91
3	Sovran Bank, NA	1,142,387	15.17	230.17	823.08
4	Central Fidelity Bank	529,363	7.03	49.42	872.50
5	Heritage S&LA	525,600	6.98	48.72	921.23
6	Investors S&LA	355,135	4.72	22.24	943.47
7	Virginia FS&LA	346,580	4.60	21.19	964.66
8	Dominion Bank of Richmond, NA	296,630	3.94	15.52	980.17
9	Franklin FS&LA	277,946	3.69	13.63	993.80
10	Southern Bank	249,016	3.31	10.94	1004.74
11	Citizens S&LA, FA	190,365	2.53	6.39	1011.13
12	Security FS&LA	189,627	2.52	6.34	1017.47
13	First Virginia Bank—Colonial	173,566	2.31	5.31	1022.78
14	Colonial S&LA	136,807	1.82	3.30	1026.08
15	Lincoln S&LA	132,456	1.76	3.09	1029.18
16	Cardinal S&LA	103,226	1.37	1.88	1031.06
17	Pioneer FS&LA	52,624	0.70	0.49	1031.55
18	Virginia First Savings, FSB	52,592	0.70	0.49	1032.03
19	Consolidated Bank & Trust Co	43,205	0.57	0.33	1032.36
20	Dominion FS&LA	41,988	0.56	0.31	1032.67
21	First FSB of Virginia	33,233	0.44	0.19	1032.87
22	Bay Savings Bank, FSB	24,478	0.33	0.11	1032.97
23	Virginia Capital Bank	21,301	0.28	0.08	1033.05
24	The Suburban Bank	11,600	0.15	0.02	1033.08
25	Union Bank & Trust Co	5,447	0.07	0.01	1033.08
26	Peoples Bank of Virginia	4,177	0.06	0.00	1033.09
27	First National Bank, Louisville	2,271	0.03	0.00	1033.09
	Total Market	$7,529,874	100.00	1033.09	1033.09

Notes: The three bank concentration ratio is 49.54 percent.

The four bank concentration ratio is 56.57 percent.

THRIFT DEPOSITS WEIGHTED AT 100.00 PERCENT

Table 4

RICHMOND, VA, RMA BANK/THRIFT MARKET[1]

June 30, 1985

(Dollar amounts in thousands)

Rank	Bank	Total IPC Deposits	Percent of Total Deposits in Market	Herfindahl-Hirschman Index	Cumulative Herfindahl-Hirschman Index
1	Bank of Virginia	$1,154,202	17.05	290.86	290.86
2	United Virginia Bank	1,122,280	16.58	275.00	565.86
3	Sovran Bank, NA	871,753	12.88	165.92	731.78
4	Heritage S&LA	525,600	7.77	60.32	792.10
5	Central Fidelity Bank	413,535	6.11	37.34	829.44
6	Investors S&LA	355,135	5.25	27.54	856.98
7	Virginia FS&LA	346,580	5.12	26.23	883.20
8	Franklin FS&LA	277,946	4.11	16.87	900.07
9	Dominion Bank of Richmond, NA	249,197	3.68	13.56	913.63
10	Southern Bank	245,152	3.62	13.12	926.75
11	Citizens S&LA, FA	190,365	2.81	7.91	934.66
12	Security FS&LA	189,627	2.80	7.85	942.51
13	First Virginia Bank—Colonial	168,413	2.49	6.19	948.71
14	Colonial S&LA	136,807	2.02	4.09	952.79
15	Lincoln S&LA	132,456	1.96	3.83	956.62
16	Cardinal S&LA	103,226	1.53	2.33	958.95
17	Pioneer FS&LA	52,624	0.78	0.60	959.55
18	Virginia First Savings, FSB	52,592	0.78	0.60	960.16
19	Dominion FS&LA	41,988	0.62	0.38	960.54
20	Consolidated Bank & Trust Co	38,600	0.57	0.33	960.87
21	First FSB of Virginia	33,233	0.49	0.24	961.11
22	Bay Savings Bank, FSB	24,478	0.36	0.13	961.24
23	Virginia Capital Bank	21,128	0.31	0.10	961.34
24	The Suburban Bank	11,261	0.17	0.03	961.36
25	Union Bank & Trust Co	5,447	0.08	0.01	961.37
26	Peoples Bank of Virginia	3,949	0.06	0.00	961.37
27	First National Bank, Louisville	71	0.00	0.00	961.37
	Total Market	$6,767,645	100.00	961.37	961.37

Notes: The three bank concentration ratio is 46.52 percent.

The four bank concentration ratio is 54.29 percent.

THRIFT DEPOSITS WEIGHTED AT 100.00 PERCENT

[1] Total IPC deposits for banks and total deposits for thrifts.

Table 5

TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1985

	HHI Based on Total Bank Deposits	HHI Based on Total Bank IPC Deposits	Change	Percent of Change
Washington, D.C.	816	807	-9	-1.10
Baltimore, Maryland	1254	1253	-1	-0.08
Charlotte, North Carolina	3126	3003	-123	-3.93
Richmond, Virginia	1998	1983	-15	-0.75
Norfolk-Portsmouth, Virginia	2270	2210	-60	-2.64
Winston-Salem, North Carolina	4969	4471	-498	-10.02
Raleigh, North Carolina	1481	1451	-30	-2.03
Columbia, South Carolina	1905	1871	-34	-1.78
Charleston, West Virginia	1430	1380	-50	-3.50
Greenville, South Carolina	1475	1519	44	2.98
Average Change			-77.6	-3.74

non-IPC deposits yields changes in the HHI comparable to results already observed when IPC deposits are considered for banks only. IPCs reduce the ten-market average HHI by 76 when thrifts are added to the product market compared with a reduction of 78 in the HHI when the market is restricted to banks. This average includes reductions in HHIs for specific markets ranging from 6 in the Washington market to 437 for Winston-Salem. Greenville again represents an exception with an increase in the HHI of 52 (Table 6).

It is widely recognized that thrifts may not be fully comparable to commercial banks in all respects despite the enactment in recent years of legislation which enables thrifts to accept demand deposits (NOW accounts) and grant commercial loans. Others suggest that one hundred percent of thrift deposits is the relevant standard because thrifts have the potential to become full competitors of banks. The Board of Governors' pragmatic approach to this reality usually has been to permit the inclusion of 50 percent of the deposits held by thrifts for the purpose of determining concentration in a banking market. On the other hand, the U. S. Department of Justice elects to calculate separate indices for "wholesale" and "retail" markets. Justice includes one hundred percent of thrift deposits in the retail market, while only twenty percent of thrift deposits are added to the wholesale market.

Table 7 demonstrates the effect of weighting thrift deposits at 50 percent in the District's largest markets. This approach produces the greatest variation in the HHI when IPC deposits are compared with total deposits. The mean reduction in HHI after removing non-IPC deposits from the market is 96 under this alternative. The increase in concentration for the Greenville, South Carolina, market due to using IPC deposits shows the risks inherent in making sweeping generalizations about banking markets. Banks in the market hold approximately 50.3 percent of total bank/thrift deposits, but only 48.6 percent of total IPC deposits. The smaller banks in the market apparently have managed to attract a disproportionately large share of non-IPC deposits. The first and second largest depository institutions in the market are thrifts. These two organizations hold 43.2 percent of total deposits and 44.7 percent of total IPC deposits.

Conclusion

Analysts usually include at least a portion of thrift deposits when measuring banking market structure. The only thrift deposit category currently reported

Table 6

TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1985

	HHI Based on Total Deposits of Banks and Thrifts	HHI Based on Total IPC Deposits of Banks and Thrifts	Change	Percent of Change
Washington, D.C.	371	365	−6	−1.62
Baltimore, Maryland	522	501	−21	−4.02
Charlotte, North Carolina	1946	1810	−136	−6.99
Richmond, Virginia	1033	961	−72	−6.97
Norfolk-Portmouth, Virginia	1038	993	−45	−4.34
Winston-Salem, North Carolina	2948	2511	−437	−14.82
Raleigh, North Carolina	1017	993	−24	−2.36
Columbia, South Carolina	1062	1036	−26	−2.45
Charleston, West Virginia	1112	1069	−43	−3.87
Greenville, South Carolina	1324	1376	52	−3.93
Average Change			−75.8	6.13

Table 7

TOP TEN BANKING MARKETS
FIFTH DISTRICT
June 30, 1985

	HHI Based on Total Bank Deposits and 50 Percent of Thrift Deposits	HHI Based on Total Bank IPC Deposits and 50 Percent of Thrift Deposits	Change	Percent of Change
Washington, D.C.	466	453	−13	−2.79
Baltimore, Maryland	725	699	−26	3.59
Charlotte, North Carolina	2401	2257	−144	−6.00
Richmond, Virginia	1339	1258	−81	−6.05
Norfolk-Portsmouth, Virginia	1333	1261	−72	−5.40
Winston-Salem, North Carolina	3691	3187	−504	−13.65
Raleigh, North Carolina	1138	1099	−39	−3.43
Columbia, South Carolina	1235	1173	−62	−5.02
Charleston, West Virginia	1221	1170	−51	−4.18
Greenville, South Carolina	1082	1110	28	2.59
Average Change			−96.4	−6.59

by geographic location, however, is total deposits. This constitutes a persuasive reason for continuing to evaluate market concentration on the basis of total deposits despite the attraction of IPC deposits. Combining total deposits of thrifts with total IPC deposits of banks may overemphasize the market concentration attributed to thrift institutions. Proponents of thrifts as full competitors of banks do not attempt to claim that thrift deposits should be weighted more heavily than deposits held by commercial banks when assessing competitive relationships.

Our review of large banking markets in the Fifth Federal Reserve District tends to confirm that non-IPC deposits are more significant relative to the structure of some markets than for others. Whenever HHI statistics for banking markets begin to approach the critical range as determined by the Merger Guidelines, both applicants and bank regulatory agencies may find it constructive to review the market in terms of alternative deposit definitions as well as to explore the underlying causes of those differences.

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