

# FIFTH DISTRICT BANKS' RETURN ON ASSETS: HIGHEST IN DECADE

*John R. Walter and Donald L. Welker*

## Overview

In 1988 commercial banks in the Fifth Federal Reserve District<sup>1</sup> enjoyed a significant improvement over the previous year's return on assets (ROA), defined as the ratio of net income to average assets. This figure reached its highest level of the past ten years. A special factor, namely the extraordinary provisions for loan losses set aside in 1987, accounts for much of this improvement. Loss provisions in 1987 exceeded actual loan charge-offs. The excess allowed Fifth District banks to set aside smaller provisions for loan losses in 1988 and provided some of the fuel for a historically strong 1988 profit figure. Other than lower provisions for loan losses, income and expense relative to assets at Fifth District banks changed little from 1987 to 1988. Much the same experience was typical of all U.S. banks, although the relative improvement in ROA for the nationwide group was greater than for Fifth District banks. Despite this gain for all U.S. banks, ROA in the Fifth District still exceeded the national average because of Fifth District banks' higher interest margins and better loan quality.

## Interest Margin

Even as interest rates increased an average of 100 basis points during 1988, average net interest margin remained remarkably stable for Fifth District banks (Table I). Closely matched asset and liability interest rate sensitivities enabled District banks to maintain a steady net margin. True, rates paid on Fifth District banks' liabilities were on average slightly more sensitive to interest rate movements than were their asset yields; therefore, rising interest rates in 1988 tended to push up interest expenses more than interest income. But banks offset the negative effect this had on net margin by increasing loans and decreasing securities. Table V shows that on average loans earned considerably more than securities.

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<sup>1</sup> Maryland, Virginia, North Carolina, South Carolina, the District of Columbia, and most of West Virginia. The District of Columbia is referred to as a "state" in this study.

In 1988, Fifth District banks continued a long-standing trend of posting higher net interest margins than banks nationwide (Tables I and II). District banks enjoyed slightly more interest income relative to assets and much lower interest expense than did all U.S. banks. The significant difference between District and all U.S. banks' interest expense relative to assets was due to District banks' greater access to lower cost funding. Specifically, Fifth District banks depended much less on costly foreign office deposits, and relatively more on the liabilities Table VI categorizes as other deposits, including NOW accounts, MMDA accounts, savings deposits, and small time deposits. Table VI shows the benefits of such a strategy in terms of cost of funds.

## Loss Provisions

Most of the improvement in ROA at banks in the Fifth District and throughout the nation resulted from a much lower loan loss provision in 1988 compared with 1987. During 1987 banks set aside large provisions for future loan losses based on anticipated losses on loans to less developed countries (LDCs). As can be seen in Tables I and II, banks in the Fifth District and in the nation as a whole returned provisions to more customary levels in 1988. Large banks (end-of-year assets in excess of \$1 billion) were responsible for most of the reduction in loss provisions for the aggregate of all banks at the District and national levels in 1988 since they make the majority of LDC loans. In the Fifth District virtually all the LDC debt on large banks' books was sold or charged off in 1988.

Allowance for loan losses is analogous to a savings account<sup>2</sup> from which future loan losses can be deducted. In 1987 large Fifth District banks added more funds to the account than they withdrew to charge off bad loans; while in 1988 they withdrew more than they added. Across the United States,

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<sup>2</sup> It should be emphasized that this is an analogy and not an identity. Unlike a savings account, the allowance for loan losses is not a source of cash.

large banks followed the same pattern of loss provisions exceeding charge-offs in 1987 and charge-offs exceeding loss provisions in 1988 (Tables I and II).

Since large banks allocated more to "savings" than they used in 1987 and less than they used in 1988, ROA and return on equity (ROE), the ratio of net income to average equity, were administratively lowered in 1987 and administratively raised in 1988. There is no evidence, however, that this development constitutes a "milking" of reserves for the purpose of enhancing reported earnings. Rather, banks simply chose to bear much of the pain of lowered profits caused by nonperforming LDC loans in one year—1987. The observed results do serve to highlight a material problem when attempting to compare bank performance from one accounting period to another.

In 1988 Fifth District banks continued to exhibit much lower ratios of past due and nonaccrual loans to total loans than the national composite. Loans past due or not accruing interest were .87 percent of total loans in 1988 compared to 1.11 percent in 1987. Throughout the nation this ratio stood at 2.95 percent in 1988 as compared to 3.49 in 1987, more than three times the comparable delinquency rate for Fifth District institutions. The Fifth District's low level of problem loans meant that banks charged off fewer loans and set aside lower provisions for loan losses than did banks in the rest of the nation, leading to superior ROA and ROE results for District banks.

### Noninterest Revenue and Expense

Noninterest income increased and noninterest expense declined at Fifth District banks during 1988 (Table I). The net effect was a six basis point improvement in income before taxes. Noninterest income grew because of slight increases in service charges on accounts and leasing income, but mostly from growth in all other noninterest income consisting chiefly of trading account income, trust income, credit card fees, mortgage servicing fees, and safe deposit box rentals. Noninterest expense, which includes salaries, bank premises expenses, fees paid by banks to their bank holding companies, deposit insurance fees, legal fees, and advertising, declined largely because of a fall in salaries relative to assets. This means that the labor input per dollar of assets fell, possibly indicating greater internal operating efficiencies.

For the nation as a whole, noninterest income relative to assets rose more than in the Fifth District. Noninterest expense also rose, so that the net result was a six basis point improvement in before-tax income relative to assets. A comparison of Tables I

and II shows that noninterest income for all U.S. banks was a higher percentage of assets than was noninterest income for Fifth District banks. Still, Fifth District banks earned more relative to assets from service charges on accounts than did the average U.S. bank. Unfortunately the data are not specific enough to paint a more complete picture of the difference. There is evidence, however, that large banks at the national level derived substantially more income from trading accounts, foreign exchange trading, and trust activities than did their Fifth District counterparts. Over the years covered in Tables I and II, it is clear that while Fifth District banks have been unable to raise noninterest income as quickly as the U.S. average, they have continued to lower noninterest expense, an accomplishment that has eluded banks throughout the rest of the nation.

Management fees assessed by parent bank holding companies on their bank subsidiaries, a noninterest expense, can lead to a distortion of performance results. Banks that are not subsidiaries of holding companies obviously do not pay such fees, while the fees are fairly large relative to assets for bank holding company subsidiary banks. Distortion of the subsidiary bank's profit occurs if this expense category is simply used to pass income upstream from the bank to the bank holding company. There is no distortion, of course, to the extent that management fees pay for services performed by the bank holding company that would otherwise have to be provided by the subsidiary bank. If fees exceed service costs, however, the bank subsidiary's income, ROA, and ROE will be artificially depressed. Management fees amounted to approximately 14 percent of Fifth District subsidiary banks' net income and about .13 percent of total assets in 1988. Without this expense allocation, such banks' income before taxes relative to assets could have been as much as 13 basis points higher.

### Income Taxes

Relative income tax burdens were remarkably stable across size classifications of U.S. banks in 1988. Whether large, medium (assets between \$100 million and \$1 billion) or small, banks paid out roughly 30 percent of income before taxes. While on average Fifth District banks paid taxes equal to 23 percent of income before taxes, there were differences among size classes. Though small- and medium-sized District banks' taxes amounted to slightly more than 25 percent of income before taxes, large District banks were able to limit this figure to 22 percent. The lower effective tax burden for Fifth District banks accounts for one-half of their 18 basis

point superiority in 1988 ROA relative to the performance of all U.S. banks.

## Profits

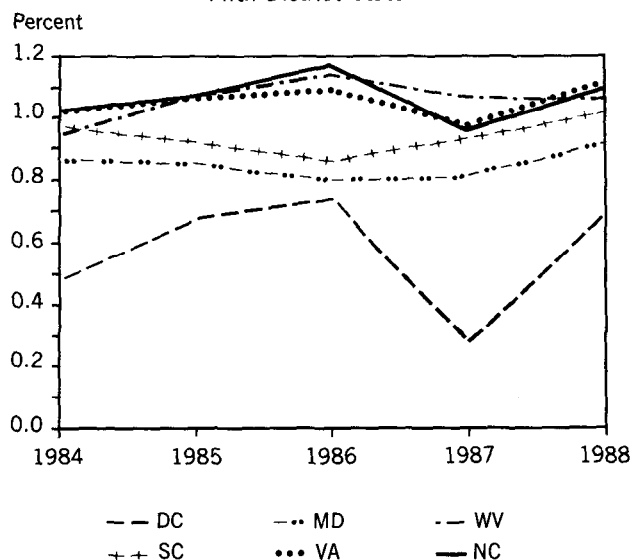
Table I shows that ROA at Fifth District banks climbed from .88 percent in 1987 to 1.01 percent in 1988. At the national level (Table II) the improvement in ROA was spectacular, growing from a dismal .11 percent in 1987 to .83 percent in 1988. Return on equity grew at Fifth District banks (Table I) from 13.83 percent for all of 1987 to 15.60 percent for 1988, high by historical standards. For all U.S. banks (Table II) ROE improved from 1.88 percent in 1987 to 13.50 percent in 1988. From 1987 to 1988 the proportion of Fifth District banks reporting no net income or losses remained about 10 percent (Table I). For banks throughout the nation the proportion fell from 18 to 14 percent (Table II).

The improvement in ROA at the District level reflected substantial improvements at large banks and medium-sized banks. Table III shows that both large banks' and medium banks' average ROA increased from 1987 to 1988, while ROA for small Fifth District banks fell. Small District banks' ROA, falling since 1985, was below the average for the District for the first time in recent years in 1988. To a large degree the decline in ROA for small District banks reflects their inability to offset declining net interest margins with improvements in noninterest income or savings in noninterest expenses.

Bank profitability varied considerably among states in the Fifth District (chart and Table IV). In terms of ROA, Virginia and North Carolina banks topped the six states in the District. Both the Virginia and the North Carolina economies have been robust performers, contributing to the strong performance of banks in these states. In addition, bank holding companies in Virginia and North Carolina have led the nation in interstate bank acquisitions.

Although West Virginia banks continue to show relatively high ROAs, the state had the lowest average 1988 ROE in the District. The difference between ROA and ROE in West Virginia's banks is attributable directly to their strong capital position. While the West Virginia economy has not been strong in recent years, banks there have learned to adapt and produce consistently strong earnings compared with most of the nation's banks. The stable ROA produced by West Virginia banks in recent years (chart) contrasts with the fluctuations in ROA of District of Columbia banks. But D.C. banks were able to record a higher ROE number than their West Virginia counterparts due to higher leverage (the ratio of assets to equity).

## RETURN ON ASSETS Fifth District States



## Capital

Risk-based capital guidelines adopted by the Federal Reserve in January 1989 will phase in minimum capital ratios between 1990 and 1992 to make regulatory capital sensitive to differing levels of risk borne by the bank. The guidelines require banking organizations in the United States to achieve minimum ratios of regulatory capital to assets with attention to asset riskiness and off-balance sheet exposure. Concern with meeting the requirements led banks, especially large banks likely to engage in off-balance sheet activities, to add capital during 1988.

Fifth District banks increased equity capital relative to assets in 1988 (Table VII). Large banks added most substantially to capital, doing so mainly by retaining some of the year's earnings. Small banks made limited additions to capital by increasing common stock and surplus relative to assets, though this was offset to a degree by lower contributions to retained earnings due to weaker 1988 income performance. Assets grew more quickly than common stock and surplus at medium banks leading to a decline in the equity capital to assets ratio despite additions to retained earnings.

Table VII shows that for all U.S. banks, equity capital to assets ratios increased even more than in the Fifth District. Most of the increase was in the large bank category as was the case for the District. But even with the larger additions to equity capital at the national level, Fifth District equity capital re-

mained a bit higher on average than did that for U.S. banks.

### Conclusion

Fifth District banks continued to outperform the average for all U.S. banks in 1988 in terms of ROA and ROE. While the relative performance gap between the Fifth District's and the nation's banks narrowed during the year, this was mainly because

earnings at Fifth District banks did not fluctuate as dramatically due to year-to-year changes in loan loss provisions.

Recent regulatory emphasis on strong equity capital positions for all commercial banks sends the message that banks must generate an income stream commensurate with required levels of capital. Fifth District banks' performance in 1988 demonstrated the ability to generate such an income stream.

Table I

### INCOME AND EXPENSE AS A PERCENT OF AVERAGE ASSETS<sup>1</sup> FIFTH DISTRICT COMMERCIAL BANKS, 1984-88

Item	1984	1985	1986	1987	1988
Gross interest revenue	10.02	9.48	8.51	8.09	8.62
Gross interest expense	6.33	5.70	4.97	4.59	5.13
Net interest margin	3.69	3.78	3.54	3.50	3.49
Noninterest income	1.15	1.22	1.22	1.22	1.25
Loan and lease loss provision	0.33	0.46	0.40	0.50	0.33
Securities gains	-0.02	0.06	0.15	0.07	0.02
Noninterest expense	3.37	3.40	3.29	3.17	3.14
Income before tax	1.12	1.20	1.23	1.12	1.30
Taxes	0.19	0.22	0.23	0.25	0.30
Other <sup>2</sup>	0.00	0.00	0.00	0.00	0.01
ROA: Return on assets <sup>3</sup>	0.93	0.98	1.00	0.88	1.01
Cash dividends declared	0.31	0.31	0.34	0.47	0.48
Net retained earnings	0.62	0.67	0.66	0.41	0.53
ROE: Return on equity <sup>4</sup>	14.62	15.41	15.87	13.83	15.60
Average assets (\$ millions)	137,131	156,574	181,133	203,376	221,581
Net income (\$ millions)	1,275	1,539	1,817	1,775	2,234
Loan and lease loss provision (\$ millions)	453	713	733	1,022	731
Loan and lease charge-offs, net of recoveries (\$ millions)	251	405	533	727	745
Percent of banks with net income less than or equal to zero	6.0	6.3	8.3	10.3	10.1

Note: Discrepancies due to rounding error.

<sup>1</sup> Average assets are based on fully consolidated volumes outstanding at the beginning and at the end of the year.

<sup>2</sup> Includes extraordinary items and other adjustments after taxes.

<sup>3</sup> Return on assets is net income divided by average assets.

<sup>4</sup> Return on equity is net income divided by average equity. Average equity is based on fully consolidated volumes outstanding at the beginning and at the end of the year.

Source: Consolidated Reports of Condition and Income.

Table II

**INCOME AND EXPENSE AS A PERCENT OF AVERAGE ASSETS<sup>1</sup>**  
**ALL U.S. COMMERCIAL BANKS, 1984-88**

Item	1984	1985	1986	1987	1988
Gross interest revenue	10.11	9.23	8.15	7.99	8.56
Gross interest expense	6.95	5.98	5.02	4.87	5.34
Net interest margin	3.16	3.25	3.13	3.12	3.22
Noninterest income	1.27	1.39	1.46	1.63	1.73
Loan and lease loss provision	0.55	0.66	0.76	1.24	0.53
Securities gains	-0.01	0.06	0.13	0.05	0.01
Noninterest expense	3.05	3.15	3.17	3.26	3.30
Income before tax	0.82	0.89	0.81	0.29	1.13
Taxes	0.19	0.21	0.19	0.18	0.33
Other <sup>2</sup>	0.01	0.01	0.01	0.01	0.03
ROA: Return on assets <sup>3</sup>	0.64	0.70	0.63	0.11	0.83
Cash dividends declared	0.31	0.33	0.33	0.36	0.44
Net retained earnings	0.33	0.37	0.31	-0.24	0.39
ROE: Return on equity <sup>4</sup>	10.63	11.33	10.22	1.88	13.50
Average assets (\$ billions)	2,398	2,604	2,799	2,926	2,994
Net income (\$ billions)	15.4	18.1	17.4	3.3	24.8
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Loan and lease loss provision (\$ billions)	13.2	17.2	21.3	36.3	15.9
Loan and lease charge-offs, net of recoveries (\$ billions)	10.8	13.0	16.1	16.0	17.7
Percent of banks with net income less than or equal to zero	14.0	17.0	20.6	18.2	13.8

Notes: Discrepancies due to rounding error.  
For footnotes see Table I.

Source: Consolidated Reports of Condition and Income.

Table III

**RETURN ON ASSETS AND EQUITY**  
**FIFTH DISTRICT BANKS**  
(Percent)

	Small	Medium	Large	Total
ROA: Return on assets <sup>1</sup>				
1987	1.05	1.06	0.82	0.88
1988	0.97	1.15	0.98	1.01
ROE: Return on equity <sup>2</sup>				
1987	11.14	13.31	14.50	13.83
1988	10.25	14.37	16.90	15.60

<sup>1</sup> See footnote 3, Table I.

<sup>2</sup> See footnote 4, Table I.

Table IV  
**BANK PERFORMANCE MEASURES BY FIFTH DISTRICT STATE—1988**  
 (Percent)

	DC	MD	NC	SC	VA	WV
<b>SMALL BANKS</b>						
ROA	-0.06	1.01	0.46	1.02	1.18	0.95
ROE	-0.62	11.07	4.23	9.57	12.58	10.72
Nonperforming loans & leases	1.19	0.79	0.83	1.31	1.08	2.07
Net charge-offs	1.01	0.15	0.39	0.33	0.32	0.60
Number of banks	10	46	37	56	123	138
<b>MEDIUM BANKS</b>						
ROA	0.98	1.16	1.22	0.83	1.27	1.12
ROE	15.28	14.32	13.84	10.70	16.99	13.12
Nonperforming loans & leases	1.02	0.58	0.90	0.93	0.70	1.63
Net charge-offs	0.28	0.13	0.20	0.35	0.37	0.47
Number of banks	7	36	21	12	42	36
<b>LARGE BANKS</b>						
ROA	0.66	0.84	1.09	1.05	1.05	
ROE	13.64	13.20	18.85	16.85	18.77	
Nonperforming loans & leases	1.20	0.89	0.66	0.76	0.84	
Net charge-offs	0.66	0.56	0.46	0.47	0.66	
Number of banks	4	12	9	4	8	0
<b>TOTAL</b>						
ROA	0.68	0.90	1.09	1.01	1.10	1.05
ROE	13.19	13.28	17.78	14.35	17.55	12.02
Nonperforming loans & leases	1.17	0.83	0.68	0.84	0.83	1.82
Net charge-offs	0.60	0.47	0.44	0.44	0.57	0.52
Number of banks	21	94	67	72	173	174

Notes: Banks not operating at the beginning of 1988 and those West Virginia banks headquartered outside the Fifth Federal Reserve District are excluded from these totals. Nonperforming loans & leases are loans and leases past due 90 days or more and those not accruing interest, as a percent of total loans. Net charge-offs are loan and lease charge-offs, net of recoveries, as a percent of loans.

Table V  
**AVERAGE RATES OF RETURN ON SELECTED INTEREST-EARNING ASSETS**  
**FIFTH DISTRICT COMMERCIAL BANKS, 1984-88**  
 (Percent)

Item	1984	1985	1986	1987	1988
Total loans and leases	12.59	11.92	10.63	10.05	10.52
Net loans and leases <sup>1</sup>	12.74	12.08	10.77	10.19	10.66
Total securities	9.68	9.01	8.30	7.61	8.01
All interest-earning assets	11.77	11.06	9.78	9.25	9.84

<sup>1</sup> Net loans are total loans and leases net of the sum of allowance for loan and lease losses and allocated transfer risk reserve.

Table VI  
**AVERAGE COST OF FUNDS FOR SELECTED LIABILITIES**  
**FIFTH DISTRICT COMMERCIAL BANKS, 1984-88**  
 (Percent)

Item	1984	1985	1986	1987	1988
Interest-bearing deposit accounts	8.72	7.89	6.77	6.12	6.58
Large certificates of deposit	9.47	7.91	7.07	6.65	7.43
Deposits in foreign offices	9.19	7.92	6.40	6.69	7.05
Other deposits	8.55	7.97	6.74	5.97	6.34
Subordinated notes and debentures	8.03	9.64	8.48	9.21	8.84
Fed funds	9.58	7.67	6.92	5.87	7.16
Other	9.18	6.73	5.19	7.34	7.75
All interest-bearing liabilities	8.84	7.90	6.76	6.13	6.72

Table VII  
**EQUITY TO ASSET RATIOS**  
 (Percent)

	Small	Medium	Large	Total
<b>Fifth District</b>				
1986	9.41	7.92	5.56	6.31
1987	9.63	8.00	5.70	6.41
1988	9.68	7.92	5.91	6.55
<b>All U.S. Banks</b>				
1986	8.31	6.94	5.50	6.17
1987	8.55	7.22	5.18	6.02
1988	8.72	7.23	5.58	6.28

Note: Equity capital is common stock, perpetual preferred stock, surplus, undivided profits, and capital reserves.