Fifth District Bank Performance

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PREFACE

The final four years of the 1980s were difficult for banks in the U.S. Between 1986 and 1988 problems in the agricultural and oil sectors led to losses and numerous bank failures. The nation's largest banks suffered losses as income was set aside in 1987 and 1989 to deal with problems in portfolios of loans to less developed countries (LDCs). Losses in real estate loan portfolios, due to weak real estate markets, had a significant negative effect on bank earnings in 1989. In addition, concerns for future bank earnings were raised by regulators and bank analysts because of banks' increased lending for highly leveraged corporate takeovers.

Despite the difficulties of banks nationwide, Fifth Federal Reserve District commercial banks as a group were able to maintain historically high profit rates throughout the years 1986 through 1989.[2] While 770 U.S. banks failed between January 1986 and December 1989, only two were Fifth District banks.[3] District banks almost completely eliminated their modest LDC debt exposure by selling these loans in the secondary market during 1988. Still, the outlook for District banks on other fronts may not be so sanguine. Thus, while the degree of exposure of District banks to highly leveraged loans is difficult to determine, real estate lending could limit the future profits of District banks because such loans grew as a percentage of all loans. Most ominously, nonperforming real estate loans expanded rapidly during 1989.

Fifth District commercial banks maintained a high profit rate during 1989. They outperformed banks in the rest of the United States by holding down interest costs, noninterest costs, and provisions for loan losses, and by paying out less in taxes. Fifth District banks also added enough equity capital during the year to improve their capital ratios. Their nonperforming loans grew to a high level by Fifth District standards but remained well below the average experienced by banks elsewhere in the nation. Banks outside the District suffered a significant decline in profits due to a large increase in provisions for loan losses during the year.

The next section gives the nonbanker an introduction to a bank's balance sheet by discussing the structure and adjustments to Fifth District banks' balance sheets that allowed them to maintain strong profits in 1989. The third section then reviews, in detail, Fifth District banks' income and expense results.

AN INTRODUCTION TO THE BANK BALANCE SHEET

An annual review of bank performance begins with the end of the preceding year. Balance sheet data appearing under the caption *1988* in Table I refer to summed figures for all banks in the Fifth Federal Reserve District at the close of business on Friday, December 30, 1988, the last business day of the year. Comparable information for 1989 is recorded for Friday, December 29, 1989. [NOTE: Data will be denoted as follows: Table I, line a = **(Ia)**.]

The first item on the balance sheet, ***cash and deposits in other financial institutions*** **(Ia)**, has a different meaning for banks than for other types of businesses. Most businesses regard cash (currency and coin) and deposits as sterile assets to be kept to a bare minimum consistent with operating requirements. Banks also prefer to minimize currency and coin holdings, but tend to view their deposits at other "correspondent" banks as working balances to help pay for the services correspondents provide them. Thus a $369 million reduction in cash and deposits in other financial institutions from year-end 1988 to year-end 1989 could mean District banks held less cash in their vaults, but could also mean they required fewer or less costly services from

[1] Valuable research assistance was provided by Marc D. Morris.

[2] The Fifth Federal Reserve District includes 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.

[3] Data on number of bank failures: 1986-88 figures from "Seven Years of Failures," *American Banker*, January 1, 1989; 1989 figures from Federal Deposit Insurance Corporation, Division of Research and Statistics. Figures include assistance transactions.

Table I

Balance Sheet of Fifth District Banks

($Millions)

	1988	1989	Change
Assets			
a Cash and deposits in other financial institutions	21,417	21,047	(369)
b Investment securities	43,220	52,215	8,996
c Loans & Leases—Total (=d+e+f+g+h+i)	148,551	163,702	15,151
d Home mortgage	29,268	33,485	4,217
e Commercial real estate	34,523	39,764	5,241
f Business	37,960	40,872	2,913
g Consumer	32,506	34,226	1,720
h Agricultural	1,331	1,431	100
i Other	12,963	13,924	961
j Less: Allowance for loan and lease losses	(1,856)	(1,994)	(138)
k Fed funds sold	8,547	9,361	814
l Other assets	10,179	11,259	1,080
m Total assets (=a+b+c+j+k+l)	**230,057**	**255,591**	**25,534**
Liabilities			
n NOW accounts	17,192	18,172	981
o Money market deposit accounts	27,933	28,753	820
p Savings and consumer time deposits	63,061	71,953	8,892
q Demand deposits	34,011	33,883	(128)
r Time deposits with denominations over $100,000	28,816	31,145	2,329
s Deposits in foreign offices	5,776	5,930	154
t Fed funds purchased	27,096	36,469	9,373
u Other liabilities	11,103	12,392	1,288
v Total liabilities (=n+o+p+q+r+s+t+u)	**214,988**	**238,697**	**23,709**
Equity			
w Stock	6,304	6,893	589
x Undivided profits and reserves	8,765	10,001	1,236
y Total equity (=w+x =m−v)	**15,069**	**16,894**	**1,825**

Source: Consolidated Reports of Condition and Income.

correspondents, or chose to pay fees for services in lieu of holding correspondent balances. Available data are not sufficient to determine the relative importance of the three explanations.

Investment securities **(Ib)** refers to Fifth District banks' investments in U.S. government securities and municipal securities (debt issued by state and local governments). U.S. government securities can be sold quickly if cash is needed. They also have no credit risk or risk of default, since the federal government backs them. Most municipal securities are considered to have minimal credit risk and, in addition, provide a source of tax-exempt income. Banks in the Fifth District increased their holdings of government securities by nearly $9 billion in 1989.

District banks lent about $15.2 billion more in 1989 than they received in repayments from their borrowing customers **(Ic)**. Inevitably, banks make some loans that are never fully repaid. They provide for this credit risk with an ***allowance for loan and lease losses*** **(Ij)** which is deducted from ***total loans and leases*** **(Ic)** to arrive at a figure for the net loans that are believed collectible. Among Fifth District banks during 1989, the increase in the allowance for loan losses of only $138 million relative to additional loans of $15.2 billion suggests a relatively high degree of confidence that the loans will be repaid.

The balance sheet does not show the amount actually charged off as loan and lease losses in 1989. To derive this amount, it is necessary to use the income statement (Table II) as well as the balance sheet. The income statement shows that ***provision for loan and lease losses*** **(IIn)** totalled $791 million at the end of 1989. The $791 million plus the balance sheet figure of $1,856 million in end-of-1988

Table II

Income Statement of Fifth District Banks

($Millions)

	1988	1989
Interest Income		
a Interest on balances with depository institutions	426	442
b Interest and fees on loans and leases	14,776	17,911
c Interest and dividends on securities	3,474	3,925
d Interest income from trading accounts	71	168
e Income from fed funds sold	610	838
f Total interest income (=a+b+c+d+e)	**19,356**	**23,284**
Interest Expense		
g Interest on deposits	8,988	11,181
h Expense of fed funds purchased	1,956	2,830
i Interest on borrowings	341	496
j Interest on mortgage indebtedness	19	20
k Interest on subordinated notes	74	87
l Total interest expense (=g+h+i+j+k)	**11,378**	**14,614**
m Net interest income (=f−l)	**7,978**	**8,670**
n Provision for loan and lease losses	735	791
o Noninterest income	2,518	2,836
p Noninterest expense	6,951	7,540
q Gains or losses on securities	50	77
r Income before taxes (=m−n+o−p+q)	2,860	3,252
s Income taxes	656	816
t Extraordinary income—net of taxes	19	4
u Net income (=r−s+t)	**2,223**	**2,441**

Source: Consolidated Reports of Condition and Income.

allowance for loan and lease losses **(Ij)** indicates that $2,647 million was available in 1989 to absorb loan and lease losses. Inasmuch as the year-end allowance for losses was $1,994 million **(Ij)**, charge-offs less recoveries and adjustments during 1989 must have been $2,647 − $1,994 = $653 million.

Federal legislation requires every depository institution (commercial banks, savings and loan associations, savings banks, and credit unions) to hold reserves in the form of vault cash or deposits with one of the twelve Federal Reserve Banks. These required reserves are in proportion to certain classes of the institution's deposits. A depository institution with reserves in excess of the required amount may lend these fed funds to other institutions that have inadequate amounts of required reserves. Such loans show up on the lending bank's balance sheet as ***fed funds sold*** **(Ik)**. Fed funds are generally lent overnight, and the rate they earn changes daily with supply and demand.

The remaining asset category in Table I is ***other assets*** **(Il)**. This category consists mainly of buildings and equipment including automated teller machines and computers. It also includes prepaid expenses such as insurance premiums and magazine subscriptions. In 1989, Fifth District banks added more than $1 billion, net of depreciation expense, to other assets.

The liabilities section of the balance sheet shows that Fifth District banks obtained funds from a variety of sources. The first item in this category, ***NOW accounts*** (negotiated order of withdrawal accounts) **(In)**, is a relatively new type of checking account that pays interest. The Depository Institutions Deregulation and Monetary Control Act of 1980 allowed banks and other depository institutions nationwide to offer NOW accounts. Before 1980 only depository institutions in the New England states had been allowed by Congress to offer such accounts. Bank depositors added just under $1 billion to their NOW accounts in District banks in 1989.

Between 1979 and 1982 money market funds (MMFs) offered by investment companies grew rapidly at the expense of deposits in depository institutions. Interest rate ceilings limited the rates depository institutions could pay on deposits to levels below rates paid on MMFs. To allow depository institutions to compete with investment companies for deposits ***money market deposit accounts*** (MMDAs) **(Io)** were authorized December 1982. Like MMFs offered by investment companies, MMDAs offered by banks and other depository institutions pay a market-determined rate of interest and provide limited check writing privileges. MMDAs offer a safety advantage: they are insured by the Federal Deposit Insurance Corporation (FDIC), an agency of the federal government, while MMFs are not.

Innovative banking products have augmented but not replaced ***savings and consumer time deposits*** **(Ip)**. These traditional savings accounts include passbook savings accounts, "statement" savings accounts (which do not require passbooks), and small certificates of deposit, which are deposits left with the bank for a specified period. Savings and consumer time accounts continue to represent the largest single component of bank liabilities in the Fifth District. In fact, depositors expressed their approval of these accounts at District banks by depositing $8.9 billion more than they withdrew in 1989. A portion of this increase in savings was provided by interest accumulated on balances carried over from 1988. This built-in growth factor makes savings deposits particularly attractive to banks.

Table I shows that ***demand deposits*** **(Iq)** continued to supply nearly $34 billion to banks in the District. Balances of these non-interest-earning checking deposits were down slightly (by $128 million) from the previous year. Contrary to popular belief, demand deposits do not represent a source of "free" money because banks must supply costly check-clearing and bookkeeping services to holders of these deposits. As is the case for all deposits, what matters is the differential or "spread" between the interest and noninterest costs associated with deposits and the yields on the banks' earning assets. This yield-cost spread remained positive and large in 1989, a period characterized by interest rates that were relatively high from a historical perspective.

The deposits described up to this point tend to be those attracted mainly from a bank's local community or service area. In contrast, funds in ***time deposits with denominations over $100,000*** **(Ir)** may come from anywhere in the world. These large certificates of deposit (CDs) are frequently referred to as "hot money" because they may move from one bank to another in response to interest rate changes of less than one-tenth of one percent. Large denomination time deposits provide a ready source of available funds to banks confronted with strong loan demands. When loan demands diminish, the bank lowers its rates on these deposits as they mature and the deposits move to other institutions paying higher rates. Large time deposits provided $2.3 billion of additional funds to Fifth District banks in 1989.

Only a few banks in the District engage in foreign operations to the extent of maintaining offices overseas. For this reason, ***deposits in foreign offices*** **(Is)** is a relatively minor source of funds. Less than $0.2 billion was added to deposits held in foreign offices during the past year.

Fed funds purchased **(It)** or borrowed is the mirror image of fed funds sold on the asset side of the balance sheet. Since fed funds are generally borrowed for no more than one day, the rate a bank pays on such borrowings varies daily with the fed funds market rate. Fifth District banks, therefore, elected to fund more than 14 percent of their assets with a liability that was extremely sensitive to interest rate movements. Nearly $9.4 billion was added to fed funds borrowing in 1989.

The difference between fed funds sold **(Ik)** of $9.4 billion and fed funds purchased **(It)** of $36.5 billion, $27.1 billion, was supplied to Fifth District banks by depository institutions in the rest of the nation. Generally, large banks tend to be net buyers of fed funds while small banks tend to be net sellers.

The last category of liabilities, ***other liabilities*** **(Iu)**, is a catchall category that includes diverse items such as accounts payable, income taxes payable, and even subordinated term debt. Subordinated debt, while included in other liabilities, resembles capital since it helps protect depositors from losses. Specifically, in the event of a bank failure, subordinated debt is not repaid until the bank's depositors are repaid.

A relatively small but indispensable source of funds to a commercial bank is equity, sometimes called equity capital or shareholders' investment. ***Total equity*** **(Iy)** rose about $1.8 billion at Fifth District banks in 1989. About $1.2 billion was a result of ***undivided profits and reserves*** **(Ix)** or earnings retained in the business after paying dividends of $1.0 billion. The banks also issued more ***stock*** **(Iw)** than they retired, realizing roughly $600 million from stock sales to investors. The increase enabled District banks as a group to produce an equity capital-to-assets ratio of 6.6 percent, a ratio significantly higher than the average for all U.S. banks. In general, the higher the equity-to-assets ratio, the sounder the bank.

The structure of the balance sheet and changes made to the structure have important consequences for income and expense. Measures of Fifth District banks' performance, in other words their income and expense results, are highlighted below.

MEASURES OF BANK PERFORMANCE

Net Interest Margin

(gross interest revenue − gross interest expense)[4]

1989 compared with 1988—see Table III: Fifth District banks' ***net interest margin*** **(IIIc)** declined by four basis points as ***gross interest revenue*** **(IIIa)**, expressed as a percentage of average assets, rose by 85 basis points, while ***gross interest expense*** **(IIIb)** rose 89 basis points.

Reason interest income and expense rose: Interest rates fell through most of 1989, but over the year, still averaged 150 basis points higher than in 1988.

Why expenses grew faster than income: The greater increase in ***gross interest expense*** **(IIIb)** resulted in part because District banks' liabilities were more sensitive to interest rate movements than were assets.

Differences by size category: Small District banks (assets less than $100 million) and medium-sized District banks (assets of $100 million to $1 billion) actually *improved* net margins 1989 over 1988. Their asset and liability interest rate sensitivities were less pronounced than at large District banks where, on average, net interest margin declined.

Shifts in asset and liability compositions: Accounting for some of the increase in ***gross interest revenue*** **(IIIa)** were increased holdings of securities **(Ib)**, an earning asset, and decreased holdings of cash and deposits in other financial institutions **(Ia)** which earn no interest income. District banks also increased the share of federal funds **(It)** in their liability structure relative to other interest-bearing deposits and demand deposits. Cost per dollar of fed funds borrowings was less than those of most other sources of funds **(VIIIf)**.

Comparison of Fifth District banks with the average U.S. bank: Fifth District banks produced higher ***net interest margins*** **(IIIc)** than did their counterparts throughout the country **(IVc)** by holding down ***gross interest expense*** **(IIIb, IVb)**. Comparatively low interest expenses resulted from District banks' lack of dependence on foreign office deposits, greater use of savings, NOW, and MMDA deposits, and, importantly, from the lower rates paid on equivalent types of accounts.

Loan and Lease Loss Provision

1989 compared with 1988: ***Loan and lease loss provision ÷ average assets*** **(IIId)** declined slightly on average at Fifth District banks to the lowest level since 1983.[5]

Growth of troubled loans: The ratio ***past-due and nonaccrual loans ÷ total loans*** was at its highest level in recent years as ***charge-offs ÷ total loans*** declined at District banks.[6]

Declining allowance for loan losses: For all District banks ***allowance for loan losses ÷ past-due and nonaccrual loans*** declined from 144 percent to

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[4] All ratios through the remainder of the paper are expressed in percentage terms. As an example: at Fifth District banks net interest margin, *(gross interest revenue − gross interest expense)/average assets*, was 3.61 percent in 1988 and 3.57 percent in 1989, so that it declined by 3.61 − 3.57 = 4 basis points.

[5] Loan and lease loss provision is an expense charged against income each year and added to allowance for loan and lease losses—a contra-asset account—from which charged-off loans are subtracted. Provision for loan and lease losses is the bank's estimate of the portion of loans and leases that will not be collected.

[6] Past-due loans here and throughout the article are those for which the borrower is 90 days or more late on scheduled payments. Nonaccrual loans are those that are no longer accruing interest on the bank's books because the bank believes that the loan is not likely to be repaid. Charged-off loans are those loans that have been removed from the bank's balance sheet because of the bank's view that they are not going to be repaid by the borrower.

Table III

Income and Expense as a Percent of Average Assets[1]

Fifth District Commercial Banks, 1986-89

Item	1986	1987	1988	1989
a Gross interest revenue[2]	8.63	8.23	8.74	9.59
b Gross interest expense[2]	4.98	4.62	5.13	6.02
c Net interest margin[2] (= a − b)	**3.65**	**3.61**	**3.61**	**3.57**
d Loan and lease loss provision	0.40	0.50	0.33	0.32
e Noninterest income[2]	1.10	1.11	1.14	1.16
f Noninterest expense[2]	3.28	3.17	3.14	3.09
g Securities gains	0.15	0.07	0.02	0.03
h Income before taxes (= c − d + e − f + g)	**1.23**	**1.12**	**1.30**	**1.34**
i Taxes	0.23	0.25	0.30	0.34
j Other[3]	0.00	0.00	0.01	0.00
k ROA: Return on assets[4] (= h − i + j)	**1.00**	**0.88**	**1.01**	**1.01**
l Cash dividends declared	0.34	0.47	0.48	0.41
m Net retained earnings	0.66	0.41	0.53	0.60
n ROE: Return on equity[5]	**15.87**	**13.83**	**15.59**	**15.38**
o Average assets ($ millions)	181,133	203,376	221,614	242,587
p Net income ($ millions)	1,817	1,775	2,234	2,449
q Loan and lease loss provision ($ millions)	733	1,022	732	788
r Loan and lease charge-offs, net of recoveries ($ millions)	533	727	745	660
s Percent of banks with net income less than or equal to zero	8.3	10.3	10.1	12.1

Note: Discrepancies due to rounding error. With the exception of row s, data for each year include only those banks that were operating at the beginning of the year. The resulting figures may not agree precisely with their counterparts in Table II where figures include data from newly formed as well as existing banks.

[1] Average assets are based on fully consolidated volumes outstanding at the beginning and at the end of the year.

[2] Figures in these rows differ from those published in previous years due to changed definitions.

[3] Includes extraordinary items and other adjustments after taxes.

[4] Return on assets is net income divided by average assets.

[5] 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.

113 percent. The sources of this fall were growth in past-due and nonaccrual loans and smaller provisions for loan losses relative to loans in 1989 than in 1988. Allowance ÷ past-due and nonaccrual loans at Fifth District banks, was at its lowest level in the past several years.

Description of allowance for loan losses: Allowance for loan losses acts as a buffer from which loan charge-offs are subtracted. It protects a bank's capital against loan losses. The higher a bank's allowance for loan losses relative to loans or nonperforming loans, the more secure the bank, other things equal.

Differences by size category: While District banks of all sizes experienced growth in past-due and nonaccrual loans relative to total loans, only at large

Table IV

Income and Expense as a Percent of Average Assets[1]

All U.S. Commercial Banks, 1986-89

Item	1986	1987	1988	1989
a Gross interest revenue[2]	8.37	8.22	8.85	9.84
b Gross interest expense[2]	5.03	4.88	5.36	6.35
c Net interest margin[2] (= a − b)	**3.34**	**3.35**	**3.49**	**3.48**
d Loan and lease loss provision	0.76	1.24	0.53	0.92
e Noninterest income[2]	1.26	1.39	1.46	1.54
f Noninterest expense[2]	3.17	3.26	3.29	3.34
g Securities gains	0.13	0.05	0.01	0.02
h Income before taxes (= c − d + e − f + g)	**0.81**	**0.29**	**1.13**	**0.79**
i Taxes	0.19	0.18	0.33	0.30
j Other[3]	0.01	0.01	0.03	0.01
k ROA: Return on assets[4] (= h − i + j)	**0.63**	**0.11**	**0.83**	**0.50**
l Cash dividends declared	0.33	0.36	0.44	0.44
m Net retained earnings	0.31	−0.24	0.39	0.07
n ROE: Return on equity[5]	**10.22**	**1.88**	**13.50**	**8.03**
o Average assets ($ billions)	2,799	2,926	2,994	3,138
p Net income ($ billions)	17.4	3.3	24.8	15.8
q Loan and lease loss provision ($ billions)	21.3	36.3	15.9	28.8
r Loan and lease charge-offs, net of recoveries ($ billions)	16.1	16.0	17.7	21.4
s Percent of banks with net income less than or equal to zero	20.6	18.2	13.8	11.8

Note: Discrepancies due to rounding error. With the exception of row s, data for each year include only those banks that were operating at the beginning of the year.

For footnotes see Table III.

Source: Consolidated Reports of Condition and Income.

banks did provision for loan losses relative to assets decline. Small banks increased provisions relative to assets above their 1988 level, while medium-sized banks maintained a constant ratio.

Comparison of Fifth District banks with the average U.S. bank: On average, in 1989, U.S. banks increased loan loss provisions (IVd) 81 percent over their 1988 level while Fifth District banks' average increase was only 7 percent, slower than District asset growth. Less District income was consumed by provision for loan losses and profits were higher. ***Allowance for loan losses ÷ past-due and nonaccrual loans*** was still considerably greater at District banks in 1989 than at the average U.S. bank. Likewise, while ***past-due and nonaccrual loans ÷ total loans*** increased in 1989 at District banks, it was still only approximately *one-third* that for the average for all U.S. banks. District banks' ***charge-offs ÷ total loans*** was between one-third and one-half the U.S. average.

Growth of troubled real estate loans: As real estate values stagnated or fell in many regions of the country in 1988 and 1989, ***real estate loan losses*** began to grow throughout the nation and in the Fifth District. Past-due and nonaccrual real estate loans increased quickly at District banks in 1989, growing by 72 percent. Since District banks began 1989 with far fewer past-due and nonaccrual real estate

Table V

Return On Assets and Equity

Fifth District Banks

(Percent)

ROA: Return on assets[1]	Small	Medium	Large	Total
1987	1.05	1.06	0.82	0.88
1988	0.96	1.14	0.98	1.01
1989	0.88	1.13	1.00	1.01
ROE: Return on equity[2]				
1987	11.14	13.31	14.50	13.83
1988	10.15	14.36	16.90	15.59
1989	9.12	13.85	16.83	15.38

Note: Data for each year include only those banks that were operating at the beginning of the year.

[1] See footnote 4, Table III.

[2] See footnote 5, Table III.

Table VI

Bank Performance Measures by Fifth District State—1989

(Percent)

Small Banks	DC	MD	NC	SC	VA	WV
a ROA	0.04	0.92	0.61	0.83	0.96	0.97
b ROE	0.42	9.76	5.51	7.85	9.76	10.97
c Nonperforming loans and leases	1.23	1.35	1.32	1.04	1.44	2.08
d Net charge-offs	0.42	0.20	0.37	0.48	0.45	0.63
e Number of banks	11	47	38	60	128	126
Medium-Sized Banks						
f ROA	0.96	1.12	1.22	0.80	1.28	1.11
g ROE	13.06	13.59	13.23	10.72	16.72	12.70
h Nonperforming loans and leases	1.29	0.71	1.15	1.09	0.90	1.92
i Net charge-offs	0.23	0.24	0.33	0.50	0.34	0.49
j Number of banks	7	39	21	13	43	37
Large Banks						
k ROA	0.75	0.91	1.04	1.10	1.08	0.87
l ROE	14.99	14.00	17.67	18.07	18.55	13.28
m Nonperforming loans and leases	1.18	1.41	0.91	1.01	0.80	0.91
n Net charge-offs	0.49	0.58	0.22	0.44	0.49	0.70
o Number of banks	5	12	10	4	8	1
Total						
p ROA	0.75	0.94	1.04	1.01	1.10	1.03
q ROE	13.92	13.66	16.78	14.79	16.97	12.01
r Nonperforming loans and leases	1.20	1.30	0.93	1.03	0.88	1.92
s Net charge-offs	0.45	0.50	0.23	0.46	0.46	0.56
t Number of banks	23	98	69	77	179	164

Notes: Banks not operating at the beginning of 1989 and those West Virginia banks headquartered outside the Fifth Federal Reserve District are excluded from these totals. Nonperforming loans and 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 VII

Average Rates of Return on Selected Interest-Earning Assets

Fifth District Commercial Banks, 1986-89

(Percent)

Item	1986	1987	1988	1989
Total loans and leases	10.63	10.05	10.52	11.47
Net loans and leases[1]	10.77	10.19	10.66	11.62
Total securities	8.30	7.61	8.01	8.58
All interest-earning assets	9.78	9.25	9.84	10.78

Note: Data for each year include only those banks that were operating at the beginning of the year.

[1] Net loans and leases are total loans and leases net of the sum of allowance for loan and lease losses and allocated transfer risk reserve.

Table VIII

Average Cost of Funds for Selected Interest-Bearing Liabilities

Fifth District Commercial Banks, 1986-89

(Percent)

Item	1986	1987	1988	1989
a Interest-bearing deposit accounts	6.77	6.12	6.59	7.49
b Large certificates of deposit	7.07	6.65	7.43	8.91
c Deposits in foreign offices	6.40	6.69	7.05	9.15
d Other deposits	6.74	5.97	6.34	7.04
e Subordinated notes and debentures	8.48	9.21	8.85	10.33
f Fed funds	6.92	5.87	7.16	8.91
g Other	5.19	7.34	7.76	9.05
h All interest-bearing liabilities	6.76	6.13	6.72	7.79

Note: Data for each year include only those banks that were operating at the beginning of the year.

loans than was average for all banks, ***past-due and nonaccrual real estate loans ÷ total loans*** for District banks was still only *one-third* of the ratio for all U.S. banks at the end of 1989. Growth in the share of real estate loans during 1989, from 43 to 45 percent of all loans, suggests that District banks' losses could be even greater in 1990.

Noninterest Income and Expense

1989 compared with 1988: Fifth District banks had a two basis point improvement in ***noninterest income ÷ average assets*** **(IIIe)** and a five basis point decline in ***noninterest expense ÷ average assets*** **(IIIf)**; large District banks were responsible for most of both.

Composition of change at large banks: The improvement in ***noninterest income*** at large District banks was the result of increases in fiduciary income, foreign exchange trading income, and other miscellaneous forms of noninterest income. Other miscellaneous noninterest income includes income sources such as rental fees on safe deposit boxes, proceeds on the sale of travelers checks, and fees on credit cards issued by the bank. Service charge income relative to assets was unchanged at large banks. The decline in ***noninterest expense*** at large banks resulted from declines in salaries expense, bank premises expense, and other miscellaneous noninterest expenses. Other miscellaneous noninterest expenses includes such expenses as federal deposit insurance premiums, advertising costs, and management fees paid by subsidiary banks to their parent bank holding companies (discussed below).

Changes at small and medium-sized banks: No change in ***noninterest income*** occurred at ***small*** District banks as compared to 1988; ***noninterest expense*** increased because salaries and bank premises expense increased relative to assets. ***Medium-sized*** banks suffered a decline in ***noninterest income*** from the previous year, which was partially offset by a decrease in ***noninterest expense.***

Comparison of Fifth District banks with the average U.S. bank: Compared with Fifth District banks, the average U.S. bank had a larger improvement in ***noninterest income*** **(IVe)**, but much of the increase was largely offset by increased ***noninterest expense*** **(IVf)**. The average U.S. bank had a small increase in service charge income but a significant improvement in other forms of noninterest income including income from fiduciary activities, gains on trading accounts, and other miscellaneous forms of noninterest income. Salary expenses relative to assets at the average U.S. bank increased only slightly but most of the increase in noninterest expense was in the category of miscellaneous noninterest expenses. As in past years, the average U.S. bank produced a significantly higher level of noninterest income than the average Fifth District bank **(IVe, IIIe)**, but also a higher level of noninterest expenses **(IVf, IIIf)**. In 1989, less expense remained after netting noninterest income from noninterest expense at U.S. banks than at Fifth District banks, providing a profit advantage for the average U.S. bank.

Management fees in noninterest expense: Banks owned by bank holding companies (BHCs) often pay fees to their BHCs in return for services provided by the BHCs. These fees are not reported by banks separately but are lumped together with several different expenses as other noninterest expenses. Bank holding companies (firms owning the stock of one or more banks), do however, report management fees as a line in their income statements. Management fees for banks owned by BHCs headquartered in the Fifth District amounted to about .12 percent of assets in 1989 and 13 percent of net income, levels little changed from 1988. Because management fees, relative to net income, are significant, they are important to track. Because they can only be derived from BHCs' reports, however, and since BHCs headquartered in the Fifth District own banks in other Federal Reserve Districts, it is impossible to determine how the fees affect Fifth District bank performance. Reporting bank performance on a state or Federal Reserve District basis will become more and more difficult in the future as banking organizations continue to expand across state boundaries.

Taxes

1989 compared with 1988: ***Taxes ÷ average assets*** **(IIIi)** increased at Fifth District banks. On average, District banks' tax rate (***taxes ÷ pre-tax income***) was 25 percent, up slightly from 1988.

Differences by size category: Small and medium-sized District banks paid higher tax rates than large District banks, though the variance among size classes was not great.

Comparison of Fifth District banks with the average U.S. bank: Fifth District banks' tax rate was considerably lower than the average U.S. bank's. The average rate paid by U.S. banks was 38 percent. While rates paid by U.S. banks in the small and medium-sized categories differed little from the rates paid by Fifth District banks of the same sizes, the average large U.S. bank had a rate almost twice as high as the average large District bank. Fifth District banks on average derive a higher proportion of their income from federal ***income-tax-free assets*** such as municipal securities and loans to municipalities than does the average U.S. bank. Small and medium-sized District banks differed little from equivalent-sized banks throughout the nation, but large District banks were significantly more dependent on tax-free income than were their counterparts elsewhere in the nation.

Profits

1989 compared with 1988: ***Return on assets*** (ROA) **(IIIk)**, net income ÷ average assets, for the average of all Fifth District banks was unchanged between 1988 and 1989 at 1.01 percent. Profits measured by ***return on equity*** (ROE) **(IIIn)**, net income ÷ average equity, declined at Fifth District banks in 1989 relative to the 1988 level, as District banks added to equity.

Differences by size category—see Table V: Small District banks' average ROA fell rapidly in 1989, as it had in 1988, because of higher levels of provision for loan losses, noninterest expenses, and taxes. While medium-sized District banks' 1989 ROA declined slightly from 1988 due to a decline in noninterest income and an increase in taxes, they remained the strongest ROA performers, outperforming small and large District banks by a considerable margin. Only large District banks were able to improve on their 1988 ROA in 1989. This was the result of higher noninterest income and significant declines in provision for loan losses and noninterest expenses.

Comparison of Fifth District banks with the average U.S. bank: The average U.S. bank experienced large declines in both ROA **(IVk)** and

ROE **(IVn)** in 1989 since almost 54 percent of their income before taxes and provision for loan losses was set aside for current or future loan losses. On the other hand the ***percent of banks with net income less than or equal to zero*** throughout the nation **(IVs)** fell again in 1989 for the fourth year in a row to a level below that for the Fifth District **(IIIs)** where the percent was up in 1989. The higher level in the Fifth District was the result of a higher proportion of newly formed banks. With new banks removed, the percentage of banks with losses was lower in the District than for the U.S.

Profits by Fifth District state—see Chart, Table VI, and Table IV: ROA was, on average, higher in each of the Fifth District states **(VIp)** than it was for the U.S. **(IVk)**. Banks located in ***Virginia*** **(VIp)** produced the highest Fifth District ROA for the second year in a row. ***Washington, D.C.*** banks **(VIp)** trailed the group but continued their improvement since 1987.

Capital

1989 compared with 1988—see Table IX: As was the case in 1988, Fifth District banks added to capital during 1989.

Differences by size category—see Table IX: While the 1988 increase in capital was mostly due to increases at large banks, in 1989, *small* and *medium-sized* banks also added significantly to ***equity ÷ assets***. Small District banks added to equity capital by issuing common stock and increasing surplus. Medium-sized banks increased equity relative to assets through increases in common stock, surplus, and retained earnings. Large banks added to equity relative to assets simply by retaining a significant amount of earnings.

Retained earnings and dividends—see Table III: At Fifth District banks, retained earnings **(IIIm)** were increased at the expense of dividends **(IIIl)**.

Comparison of Fifth District banks with the average U.S. bank—see Table IX: In 1989, Fifth District banks improved their equity-to-assets ratio in comparison with the average U.S. bank, in which ***equity ÷ assets*** fell during the year. Small and medium-sized banks throughout the nation improved their equity ratios in comparison to 1988, but still lagged Fifth District banks in the same size categories. Large U.S. banks, on the other hand, suffered a significant decline in ***equity ÷ assets***.

Table IX

Equity to Asset Ratios[1]

	Small	Medium	Large	Total
Fifth District				
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
1989	10.01	8.19	5.95	6.61
All U.S. Banks				
1986	8.31	6.94	5.50	6.17
1987	8.55	7.22	5.18	6.02
1988	8.69	7.21	5.58	6.27
1989	8.92	7.47	5.42	6.20

[1] End-of-year equity divided by end-of-year assets. Equity capital is common stock, perpetual preferred stock, surplus, undivided profits, and capital reserves.

Chart

RETURN ON ASSETS

Banks in Fifth District States