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# Banking & Finance

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AN EIGHTH DISTRICT PERSPECTIVE

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SPRING 1987

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## Reviewing Small Bank Performance in 1986

As of December 31, 1986, approximately 63 percent of commercial banks in the Eighth District could be classified as small banks; that is, banks with \$50 million or less in assets. This article examines the overall condition of small banks in the Eighth District, comparing their performance to that of their national counterparts. Several measures of performance including earnings, asset quality and capital adequacy are evaluated in order to assess the operating soundness of the regional banking industry.

### Earnings

Small banks showed earnings improvement as the number of District banks with negative earnings fell from 97 in 1985 to 85 in 1986. A notable improvement occurred in those banks with less than \$25 million in assets, in which the number with negative net income declined by seven.

Two key measures of bank earnings and managerial performance are the return on assets (ROA) ratio and the return on equity (ROE) ratio. The ROA ratio, calculated by dividing a bank's net income after taxes by its average assets, gauges how well a bank's management is employing its assets. The ROE ratio, obtained by dividing a bank's net income by its equity capital, indicates the return on the shareholders' investment.

Small District banks had higher returns on assets and equity in 1986 than in the previous two years and far outperformed their national counterparts. Given the District's diversified base, these banks have been able to limit their exposure to the agricultural and energy problems experienced by lenders in other areas of the country. As indicated in the table on the next page, Eighth District banks with assets less than \$25 million earned an average 0.76 percent ROA and an 8.06 percent ROE in 1986. Banks with assets between \$25 and \$50 million had returns of 0.85 and 9.80 percent, respectively.

Increased profitability at small banks arose from both wider net interest margins and improved asset quality (which resulted in fewer loan charge-offs). Net interest margin measures the spread between a bank's interest income and interest expense. Because the maturity of bank assets tends to be longer than that of deposits, the general decline in interest rates increased the lending spread in 1986. The table shows that, for Eighth District banks with assets less than \$25 million, the average spread between interest income and expense as a percent of average assets was 4.31 and 4.19 percent for banks in the \$25-50 million category.

### Asset Quality

Asset quality is a primary factor influencing the banking industry's earnings pattern. Changes in asset quality are typically monitored by two indicators. The ratio of net charge-offs to total loans indicates the percentage of net loans (adjusted for recoveries) actually written off as losses. The second measure, the nonperforming loan rate, is the ratio of problem loans to total loans, which represents the potential for future loan losses. Problem loans include those past due greater than 89 days, nonaccrual loans and renegotiated loans.

In contrast to the national average, small District banks saw the ratio of net loan losses to total loans decline in 1986. In particular, banks with assets less than \$25 million reported a large decline, with the ratio falling from 1.51 to 1.24 percent. For small District banks, the loss rate was highest for commercial loans, with agricultural loans a close second. The nonperforming loan rate also decreased substantially at small District banks while remaining fairly stable at the national level. For District banks with assets less than \$25 million, nonperforming loans fell from 3.26 percent of total loans to 2.68 percent over the year.





**Table 1**  
**Small Bank Performance Ratios**

	December 1986		December 1985		December 1984	
	District	U.S.	District	U.S.	District	U.S.
<b>EARNINGS</b>						
<b>Return on Average Assets</b>						
< \$25 million	0.76%	0.08%	0.70%	0.28%	0.68%	0.50%
\$25-\$50 million	0.85	0.50	0.80	0.68	0.81	0.76
<b>Return on Equity</b>						
< \$25 million	8.06	0.86	7.63	2.81	7.37	4.95
\$25-\$50 million	9.80	5.77	9.29	7.81	9.36	8.74
<b>Net Interest Margin</b>						
< \$25 million	4.31	4.29	4.18	4.31	4.23	4.52
\$25-\$50 million	4.19	4.35	3.88	4.19	4.10	4.49
<b>ASSET QUALITY</b>						
<b>Net Loan Losses<sup>1</sup></b>						
< \$25 million	1.24	1.98	1.51	1.71	1.15	1.14
\$25-\$50 million	1.16	1.56	1.38	1.38	0.92	0.96
<b>Nonperforming Loans<sup>1</sup></b>						
< \$25 million	2.68	3.76	3.26	3.73	3.03	3.05
\$25-\$50 million	2.61	3.19	3.05	3.31	2.95	2.87
<b>CAPITAL ADEQUACY</b>						
<b>Total Capital Ratio</b>						
< \$25 million	10.07	10.39	9.90	10.62	9.83	10.63
\$25-\$50 million	9.29	9.36	9.25	9.39	9.19	9.29

<sup>1</sup> As a percent of total loans

## Capital Adequacy

Capital—the difference between a bank's assets and its liabilities—supports a bank's operations and provides a cushion for losses that may arise. Bank capital traditionally has been seen as a way to protect a bank and its creditors from failure. For a given quality of assets, the lower the capital base the greater the risk of insolvency. The level of capital also serves to maintain public confidence in the soundness of individual banks and the banking system as a whole.

The amount of capital by itself does not necessarily provide useful information to regulators; capital must be measured relative to those balance sheet items whose fluctuations bank capital is intended to cushion. Regulators generally are concerned with the amount of primary and total capital relative to some measure of the bank's asset base.

Improvement in bank capital ratios in recent years is apparent throughout the range of institutions. One reason

for the increased levels of capital has been the adoption of capital adequacy guidelines by the three federal agencies that regulate U.S. commercial banks: Federal Deposit Insurance Corporation, Federal Reserve System and Office of the Comptroller of the Currency. These agencies have set minimum standards of 5.5 percent primary capital to assets and 6.0 percent total capital to assets.

As indicated in the table, both for small banks in the District and the banking industry as a whole, total capital ratios are well above the minimum standards established by the bank regulatory agencies. The average total capital ratio was 10.07 percent for District banks with less than \$25 million in assets and 9.29 percent for banks in the \$25-50 million range. As of December 1986, 15 small District banks or 1.1 percent of all District banks did not meet the minimum regulatory total capital standards.

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**Banking & Finance—An Eighth District Perspective** is a quarterly summary of banking & finance conditions in the area served by the Federal Reserve Bank of St. Louis. Single subscriptions are available free of charge by writing: Research and Public Information Department, Federal Reserve Bank of St. Louis, P.O. Box 442, St. Louis, Missouri 63166. Views expressed are not necessarily official positions of the Federal Reserve System.

## EIGHTH DISTRICT BANKING DATA

LARGE WEEKLY REPORTING BANKS<sup>1</sup>

	Level I/1987 (\$ millions)	Rates of Change			
		Current Quarter IV/1986- I/1987	Current Year I/1986- I/1987	Same Periods Previous Year	
				IV/1985- I/1986	I/1985- I/1986
Selected Assets & Liabilities					
Total Loans & Leases	\$19,060	13.2%	11.8%	9.0%	7.3%
Commercial Loans	6,355	15.6	10.3	6.2	0.3
Consumer Loans	4,574	17.0	18.2	15.2	21.9
Real Estate Loans	4,680	26.4	17.0	12.3	6.2
Loans to Financial Institutions	1,102	-13.6	32.7	-37.6	-22.7
All Other Loans	2,348	-7.2	-9.2	23.8	21.6
Total Securities	4,546	24.8	11.7	6.3	5.2
U.S. Treasury & Agency Securities	3,049	53.4	31.8	-14.9	-3.5
Other Securities	1,496	-15.6	-14.9	45.6	19.4
Total Deposits	22,144	3.7	9.1	-0.7	2.5
Non-Transaction Balances	13,398	8.5	4.9	1.1	0.8
MMDAs	3,016	35.8	23.5	29.6	13.5
\$100,000 CDs	3,878	12.2	-0.5	-1.3	-4.2
Demand Deposits	6,301	-15.4	11.4	-7.0	2.6
Other Transaction Balances <sup>2</sup>	2,444	39.6	31.6	20.2	14.9

EIGHTH DISTRICT INTEREST RATES<sup>3</sup>

	Mar. 1987	Feb. 1987	Jan. 1987	Mar. 1986
NOWs	5.02%	5.04%	5.04%	5.52%
MMDAs	5.21	5.24	5.24	6.53
Time CDS				
92 — 182 days	5.58	5.56	5.52	6.96
1 — 2½ years	6.25	6.22	6.14	7.65
2½ years and over	6.63	6.63	6.64	7.99

All data are not seasonally adjusted.

<sup>1</sup> A sample of commercial banks with total assets greater than \$750 million. Historical data have been revised to incorporate adjustment factors that offset the cumulative effects of mergers and other changes involving weekly reporting banks during 1986. These adjustment factors, which are computed each year, are used to construct a consistent time series for which year-to-year growth rates can be calculated. Adjustment factors are available upon request from the Statistics Section of the Research and Public Information Department. Rates of change are compounded annual rates.

<sup>2</sup> Includes NOW, ATS and accounts permitting telephone or pre-authorized transfers.

<sup>3</sup> Average interest rates paid on new deposits by a sample of Eighth District commercial banks.



## BANK PERFORMANCE RATIOS<sup>1</sup>

	Eighth District			United States		
	IV/86	IV/85	IV/84	IV/86	IV/85	IV/84
<b>Return on Average Assets (annualized)</b>						
< \$100 million	.89%	.86%	.84%	.51%	.64%	.77%
\$100 — \$300 million	.89	.97	.95	.74	.85	.85
\$300 million — \$1 billion	.74	.53	.86	.64	.76	.84
> \$1 billion	.98	.87	.73	.65	.66	.51
<b>Return on Average Equity (annualized)</b>						
< \$100 million	10.28	10.01	9.84	5.95	7.39	8.86
\$100 — \$300 million	11.36	12.48	12.21	9.88	11.41	11.50
\$300 million — \$1 billion	9.58	6.83	11.80	9.15	10.22	12.25
> \$1 billion	14.65	13.47	11.67	11.17	11.80	9.78
<b>Loans as Percent of Deposits</b>						
< \$100 million	53.58	54.77	55.23	70.54	70.55	59.77
\$100 — \$300 million	60.13	63.32	63.28	62.32	64.47	64.89
\$300 million — \$1 billion	67.26	65.60	63.53	70.99	71.58	70.05
> \$1 billion	80.21	79.87	76.16	85.86	85.33	85.44
<b>Nonperforming Loans as Percent of Total Loans<sup>2</sup></b>						
< \$100 million	2.55	2.89	2.73	3.41	3.64	2.76
\$100 — \$300 million	1.99	2.11	2.10	2.52	2.57	2.37
\$300 million — \$1 billion	2.27	2.72	2.22	2.49	2.42	2.18
> \$1 billion	1.82	2.19	2.61	2.78	2.85	3.24
<b>Loan Loss Reserves as Percent of Total Loans</b>						
< \$100 million	1.41	1.29	1.18	1.25	1.16	1.18
\$100 — \$300 million	1.31	1.19	1.07	1.44	1.30	1.20
\$300 million — \$1 billion	1.44	1.37	1.12	1.54	1.37	1.15
> \$1 billion	1.39	1.41	1.40	1.67	1.45	1.22
<b>Net Loan Losses as Percent of Total Loans</b>						
< \$100 million	1.10	1.25	.85	1.20	1.12	.89
\$100 — \$300 million	.94	.71	.47	.99	.83	.64
\$300 million — \$1 billion	.86	.81	.51	.93	.73	.54
> \$1 billion	.57	.59	.40	.82	.71	.70

<sup>1</sup> Size range based on bank assets.

<sup>2</sup> Includes past due greater than 89 days and nonaccrual.