

FINANCIAL INDUSTRY

Issues

Agricultural Community Feels the Heat Of Long, Dry Texas Summer

For Texas agricultural banks, the effects of the persistent drought are beginning to surface.

As the Texas agricultural community waits for a break in one of the worst dry spells on record, the only sure bet is that the future will hold no shortage of challenges. The Federal Agricultural Improvement and Reform Act of 1996 (FAIR), enacted in April, phases out crop price support payments and planting controls, increasing producers' exposure to highly variable price swings and, after the transition period, uncertain income streams. Susceptible to the vagaries of nature and politics, the fate of some farmers and ranchers hangs in the balance. While Texas agricultural producers overall are facing this downturn in a decent solvency position and relatively good financial health, some are likely to experience a painful loss of real net worth in 1996.

Agricultural loan delinquencies rose sharply this spring at commercial banks, which hold the largest share of agricultural debt in Texas. With significant concentrations in agricultural loans, some banks are vulnerable to difficulties in the farm sector. Recent years have been relatively prosperous for agricultural lenders, who as a whole are in sound condition but now may need to bolster their reserves for loan losses. For Texas agricultural banks, the effects of the persistent drought are beginning to surface.

A Cautious Use of Debt

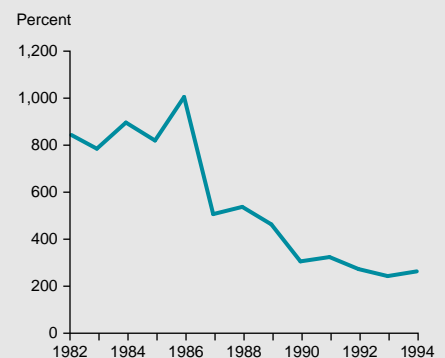
Over the past decade, Texas farmers have reduced their reliance on debt and begun building equity. Steady increases in net farm income, along with declining debt levels, have caused farm debt-to-income ratios to plummet. In 1984, net farm income for Texas was just over \$2 billion, while total

debt was estimated at \$13 billion. Data for 1994, the most recent available, show that net farm income was close to \$4 billion and debt was less than \$10 billion. The debt-to-income ratio, 896 percent in 1984, fell to 263 percent in 1994 (*Chart 1*).

Along with declining debt, stabilizing assets have caused debt-to-asset ratios to drop. The value of farm assets—mostly land—fell precipitously during the 1980s but began to stabilize around 1990. In 1994, the debt-to-asset ratio for Texas farms was 12 percent, the lowest level in over three decades (*Chart 2*).

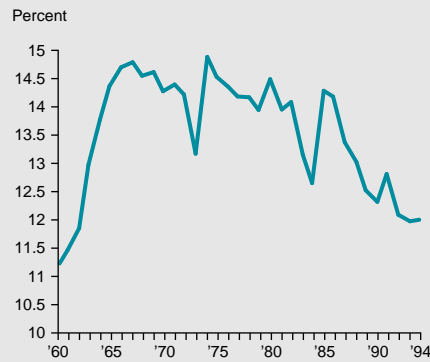
Although most Texas producers have little or no debt, crop farms tend to be in a more leveraged position than livestock operations, according to the U.S. Department of Agriculture's (USDA) Farm Costs and Returns Survey.¹ In 1994, crop farms carried an average debt-to-asset ratio of 19 percent. For

Chart 1
Debt-to-Income Ratio for Texas Farms



DATA SOURCE: USDA.

Chart 2
Debt-to-Asset Ratio of
Texas Farms



DATA SOURCE: USDA.

that same year, the average debt-to-asset ratio was just 7 percent for farms and ranches that relied on cattle production for at least 50 percent of their output. On average, cattle operations had more total assets than crop farms, and 75 percent of cattle producers' assets were in land and buildings that carried little or no debt. In contrast, crop farms had only 50 percent of total assets in land and buildings, with much higher real estate liabilities, possibly because of the capital investment in machinery and implements associated with crop production.

In general, larger crop operations had higher debt than smaller ones. Crop farms with 400 acres or less had an average debt-to-asset ratio of 12 percent in 1994, while those with more than 400 acres had an average debt-to-asset ratio of 20 percent. Crop farms were also more likely than livestock operations to have debt-to-asset ratios above 40 percent. While fewer than 8 percent of cattle producers had debt-to-asset ratios above 40 percent in 1994, 17 percent of crop producers were in this most leveraged category.

In 1994, Texas agricultural producers were in the best financial shape in years. After several years of rising income and declining debt, the overall financial position of Texas farms and ranches was mostly "favorable," according to the USDA. However, producers at risk tend to be crop farms and those with sales between \$40,000 and \$249,999. As shown in Table 1, 52 percent of farms have a financial position considered "favorable," reflecting a positive income and debt-to-asset ratio of less than 40 percent. Thirty-nine percent are listed as "marginal income," with negative income but a debt-to-asset ratio of less than 40 percent. Six percent are considered "marginal solvency," with positive returns and debt-to-asset ratios above 40 percent. Only 3 percent are listed as "vulnerable," with negative income and debt-to-asset ratios above 40 percent.

Agricultural Challenges

This year marks a watershed for U.S. agriculture as FAIR, also known as the Freedom to Farm law, brings the biggest change in government agricultural policy in over 60 years. The bill's impact is expected to hit agricultural producers more in Texas than in most other states. The USDA predicts that, over the next decade, farms specializing in red meat (cattle, hogs and sheep) and in cotton production will have the largest declines in net income. Livestock producers are vulnerable to higher feed costs that are likely when diminished government support leads to higher grain prices. Net cash income of cotton farmers is expected to fall in response to decreases in output. In 1994, roughly 60 percent of Texas agricultural cash receipts came from the production of cotton and red meat.

Texas' most severe drought since the 1950s could exacerbate the impact of changing farm programs. Between January and May 1996, the state reported the driest period on record. Livestock liquidation increased despite rock-bottom prices, and in early June, 58 percent of the state's winter wheat crop was listed in poor or very poor condition. As data become available, they no doubt will show that the debt position of Texas producers has worsened. The industry's two largest assets—livestock and real estate—have lost value in the past year, and 1996 real net farm income is expected to decline.

Table 1
Texas Agricultural Producers' Financial Position

	Favorable (Percent)	Marginal income (Percent)	Marginal solvency (Percent)	Vulnerable (Percent)
All farms	52	39	6	3
Annual income of				
\$250,000 or more	63	15	10	12
\$40,000–\$249,999	48	22	22	8
Less than \$40,000	51	42	4	2
Beef cattle	55	38	6	2
Crop	46	37	12	5
Other livestock	52	43	0	5

NOTES: *Favorable*—positive income and a debt-to-asset ratio of less than 40 percent; *marginal income*—negative income and a debt-to-asset ratio of 40 percent or less; *marginal solvency*—positive returns and a debt-to-asset ratio above 40 percent; *vulnerable*—negative income and debt-to-asset ratio above 40 percent.

SOURCE: USDA.

Some Relief in Sight

Federal assistance through ad hoc disaster relief and crop insurance will mitigate

losses. Disaster relief and other measures have been authorized to help producers, particularly those who are not eligible for federally subsidized insurance. The Federal Crop Insurance Corp. reports that, in 1995, 97 percent of eligible acres in Texas were covered by some type of federally subsidized crop insurance—more than any other state. Typically, Texas has a high percentage of eligible acres covered by insurance, probably because losses are high. Between 1991 and 1995, Texas' average loss ratio was 1.45, meaning farmers received \$1.45 for every \$1 of premium purchased.

Although a high percentage of producers are likely to be eligible for insurance compensation, some farmers still may not cover costs. Producers may be hit by losses that do not trigger crop insurance or may not receive an indemnity large enough to cover the cost of planting. Insurance covers only part of yield losses, and not at the record-high prices many crops now bring. Losses are paid at a projected season-average price for each crop, as estimated at the start of the season by the USDA.

Weathering the Drought: Texas Ag Banks

Not surprisingly, results of the Dallas Fed's Quarterly Survey of Agricultural Credit Conditions suggest that many farmers and ranchers are having difficulty repaying their loans and are requesting renewals or extensions. In the second quarter of 1996, agricultural bankers reported an increase in the number of farmers and ranchers starting the year with large debt carryover. Sixty-one percent of the bankers responding to the survey reported a decrease in the rate of loan repayment, while 62 percent reported an increase in renewals and extensions. In light of these anecdotal reports, how well are Texas' agricultural banks prepared to handle the problems appearing in the farm sector?

Insured commercial banks are the largest source of agricultural business credit in Texas, accounting for about 40 percent of all agricultural loans (*Chart 3*). Agricultural loans are defined as loans secured by farmland, which are primarily used to fund land purchases and finance capital improvements, and agricultural production loans, which are used to cover expenses associated with the raising, marketing, or carrying of crops and livestock. As of March 31, 1996, Texas banks reported \$4.08 billion in outstanding agricultural loans, which represented 3.54 percent of the state's total loans.

In terms of dollar volume, the primary lenders are relatively large banks, many of

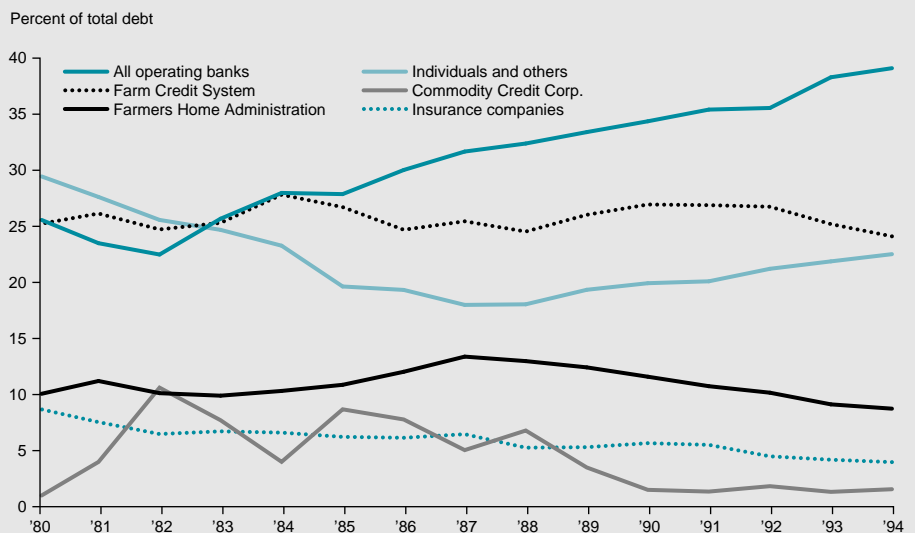
which are affiliated with regional banking organizations, such as Boatmen's Bancshares, NationsBank Corp. and Norwest Corp. The five largest Texas lenders had booked a total of \$523 million of agricultural loans as of first-quarter 1996. However, on a combined basis, agricultural lending at these banks accounted for only 1 percent of their total loans.

Traditional agricultural banks are small rural banks, many of whose charters date to the early part of the century. Typically, they are independent or subsidiaries of shell holding companies. Without a parent organization to provide capital support or the ability to diversify across regions or commodities, many Texas agricultural banks are highly vulnerable to farm-sector difficulties.

Of the 913 insured commercial banks in Texas, 218 banks devoted 25 percent or more of their total loan portfolios to agricultural loans, as of March 31, 1996. These banks held \$1.8 billion, or 44.6 percent, of the state's agricultural loans. Texas agricultural banks reported production loans of \$1.4 billion and loans secured by farm real estate totaling \$380 million. (After two years without a bank failure in Texas, two agricultural banks, Peoples Bank & Trust in Borger and the First National Bank of Panhandle, failed in the second quarter of 1996 for reasons unrelated to the drought.) The agricultural banks ranged in size from the \$2.5 million Oakwood State Bank to the \$446 million First Victoria National Bank. Only 21

Not surprisingly, ... many farmers and ranchers are having difficulty repaying their loans and are requesting renewals or extensions.

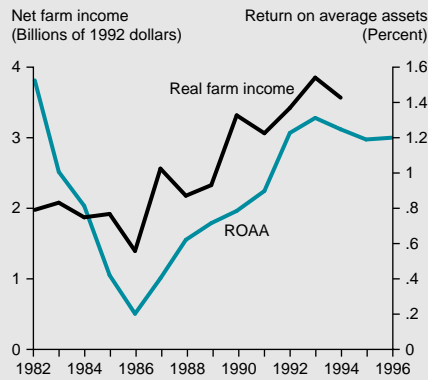
Chart 3
Texas Farm Debt by Lender



SOURCE: USDA.

Agricultural loan delinquency rates generally surge every first quarter. However, ... banks reported significantly higher [first-quarter 1996] delinquency rates.

**Chart 4
Farm Income Versus Agricultural Bank Return on Average Assets**



NOTES: 1996 return on average assets (ROAA) has been annualized. Data on 1995–96 farm income are not yet available.

SOURCE: Reports of Condition and Income; USDA.

agricultural banks could claim total assets of over \$100 million, however, and the median asset size was just \$36.5 million.

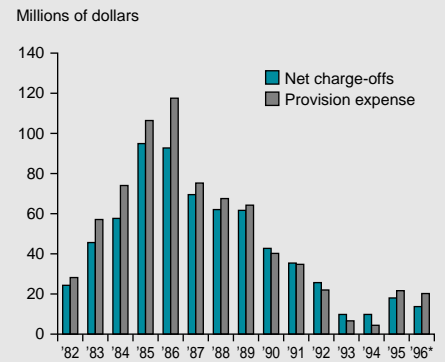
The median ratio of agricultural loans to total loans was 38.6 percent. Reflecting the limited diversification of some agricultural banks, 18 banks allocated over 65 percent of their loan portfolios to agricultural loans. In the aggregate, agricultural loans accounted for 40.9 percent of their total loan portfolio and 16.6 percent of their total assets.

A Reversal of Fortune

The earnings performance of Texas agricultural banks is closely linked to farm and ranch income (Chart 4). In the 1980s, farming difficulties caused agricultural bank earnings to spiral downward until 1986, the year that provision expenses peaked.² Then, as net loan losses receded, so did the need for provision expenses (Chart 5). Earnings charted a steady upward trend, which has moderated only recently. The return on average assets for Texas agricultural banks was a strong 1.20 percent (on an annualized basis) through first-quarter 1996, slightly above the 1.19-percent return reported for 1995.

In the wake of the farm crisis, agricultural banks spent a decade repairing their balance sheets. Troubled assets, which consist of loans 90 days or more past-due, loans on nonaccrual status and other real estate owned, peaked at \$225.9 million, or 2.52 percent of total assets, in 1989 (Chart 6). By year-end 1994, troubled assets had declined to \$88.3 million, or just 0.74 percent of total assets. In 1995, troubled assets began to rise again and, as of March 31, 1996, reached \$112.1 million, or 1.02 percent of total assets. This level, while above the 0.51 percent

**Chart 5
Net Charge-Offs and Loan Loss Provisions**



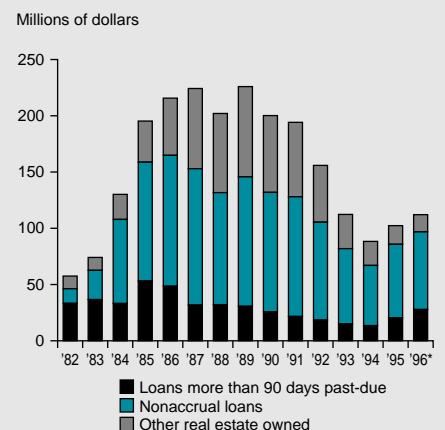
* 1996 data have been annualized.

SOURCE: Reports of Condition and Income.

troubled asset ratio that nonagricultural Texas banks reported as of first-quarter 1996, is low enough to be considered indicative of generally satisfactory asset quality.

Because of the seasonal nature of agricultural lending, agricultural loan delinquency rates generally surge every first quarter. However, in the first quarter of 1996, Texas agricultural banks reported significantly higher delinquency rates on agricultural loans than they had for many years (Chart 7). As of March 31, 1996, \$60.3 million of agricultural loans were noncurrent,³ up 61 percent from \$37.4 million a year earlier. An additional \$49.8 million of agricultural loans were 30 to 89 days past-due, up 25.8 percent from \$39.6 million a year earlier. Despite these sharp increases, noncurrent agricultural loans represented just 1.43 percent of total loans, and agricultural loans 30 to 89

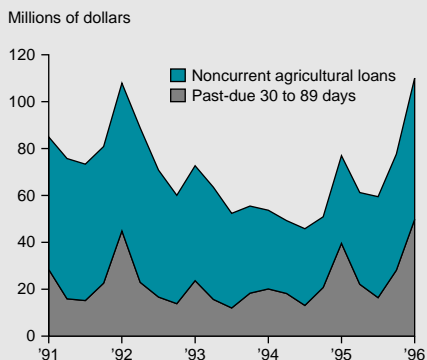
**Chart 6
Total Troubled Assets**



*1996 is as of March 31.

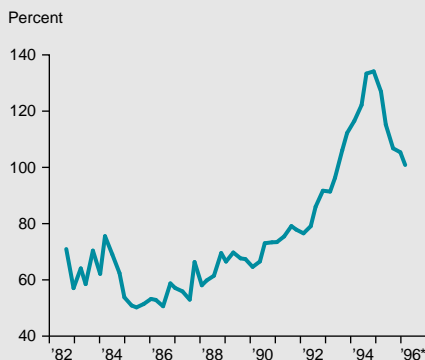
SOURCE: Reports of Condition and Income.

Chart 7
Past-Due and Noncurrent
Agricultural Loans



SOURCE: Reports of Condition and Income.

Chart 8
The Ratio of Loan Loss
Reserve to Noncurrent Loans



*The 1996 total omits data for the two agricultural banks that failed this year. 1996 data as of March 31.

SOURCE: Reports of Condition and Income.

days past-due represented just 1.12 percent of total loans.

Of greater concern is the fact that agricultural banks have allowed their reserves for loan losses to decline relative to their noncurrent loans. Provision expenses exceeded net loan charge-offs in 1995 and through the first quarter of 1996. Yet the reserve's coverage of noncurrent loans had fallen to 101 percent⁴ as of March 31, 1996, from 127 percent a year earlier (*Chart 8*). In contrast, this ratio for nonagricultural Texas banks was 151 percent as of March 31, 1996.

For agricultural banks, the reserve account's coverage of noncurrent loans still exceeded the levels of the troubled 1980s. But if net loan charge-offs increase significantly, the reserve for loan losses will be quickly depleted and will need to be replenished through provisions for loan losses, which will reduce net income.

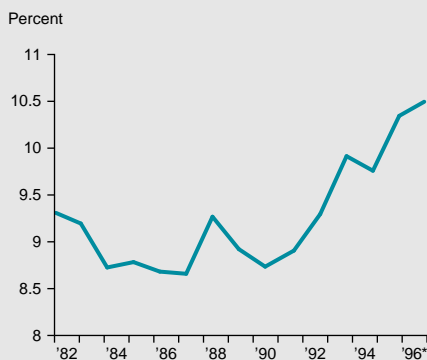
For some banks, the impact of deteriorating asset quality will be cushioned by U.S. government guarantees. In Texas, 74 agricultural banks reported that a portion of their past-due and nonaccrual loans were supported by U.S. government guarantees. For a few banks, these guarantees covered over 60 percent of past-due and nonaccrual loans. However, for the agricultural bank sector as a whole, the guaranteed portion equaled just 11.59 percent of all past-due and nonaccrual loans.

In the aggregate, agricultural banks maintain a strong equity capital position. On March 31, 1996, equity capital was 10.50 percent of total assets, a level higher than at any time during the 1980s farm crisis (*Chart 9*). Healthy retained earnings, in conjunction with slow asset growth, caused the equity-to-assets ratio to rise.

While most financial indicators suggest that the agricultural banks as a whole are in relatively good condition, levels of delinquent loans and equity capital vary widely among individual banks. As of March 31, 1996, the equity capital to total assets ratios reported by agricultural banks ranged from 5.29 percent to 24.46 percent.⁵

If, in the worst case scenario, the agricultural banks had to charge off all noncurrent and past-due agricultural loans, equity capital would fall to 2 percent or less of total assets at four of the 218 banks (*Chart 10*). Further, the resultant equity capital ratio would be over 2 percent and up to 6 percent at 12 agricultural banks, over 6 percent and up to 10 percent at 104 agricultural banks, and remain at or above 10 percent at 98 agricultural banks. The total assets of banks falling into the lowest two equity capital categories would represent only 6.92 percent of the total assets of all Texas agricultural banks.

Chart 9
The Ratio of Equity
Capital to Total Assets

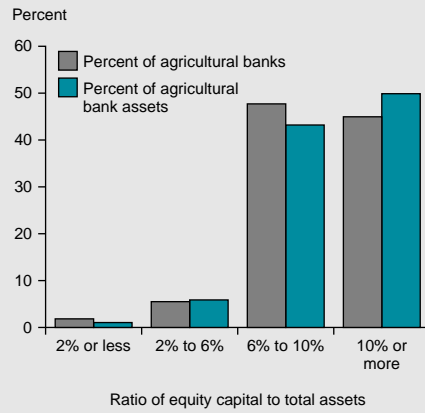


*1996 is as of March 31.

SOURCE: Reports of Condition and Income.

Overall, most of Texas' agricultural banks appear to have sufficient capital strength for the near term.

**Chart 10
Distribution of Texas Agricultural Banks by Equity Capital Ratio**



NOTE: Equity capital ratio excludes noncurrent agricultural loans (past-due over 90 days and nonaccrual).

The Outlook for the Texas Ag Community

While it is too early to predict the full impact of the immediate drought, for some producers the recent dry spell will hamper their ability to adapt to changing farm programs. Most Texas producers entered the downturn with little or no debt, but evidence suggests that farmers and ranchers are having difficulty repaying their loans.

Overall, most of Texas' agricultural banks appear to have sufficient capital strength for the near term. For now, though, earnings appear to have passed their cyclical peak. With the reduction of government programs and payments still looming ahead, the income trend is likely to be flat at best. But although some individual banks may find their financial condition considerably weakened, as a whole Texas agricultural banks are better prepared now to handle a crisis in the farm sector than they were in the 1980s.

— Karen Couch
Fiona Sigalla

Notes

The authors thank Mitch Morehart of the USDA for providing data and helpful comments.

- ¹ The data referenced from the Farm Costs and Returns Survey (FCRS) and the historical series used in Chart 2 are from different USDA surveys. The USDA's FCRS data estimate a debt-to-asset ratio of 9 percent for all Texas farm businesses in 1994. The variation in results may stem from both sampling error and differences in the definition of debt for farm business purposes.
- ² Sixty-nine Texas agricultural banks failed between 1982 and 1993.
- ³ Noncurrent loans are loans on nonaccrual status plus loans past-due 90 days or more.
- ⁴ These numbers exclude the two agricultural banks that failed in the second quarter of 1996.
- ⁵ This calculation excludes the two agricultural banks that failed in the second quarter of 1996.

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11K Bank Notes

Banks in the Eleventh Federal Reserve District reported first-quarter earnings of \$678 million, for an annualized return on average assets of 1.28 percent. These results exceeded those of a year ago, when net income of \$519 million represented a return on average assets of 1.07 percent.

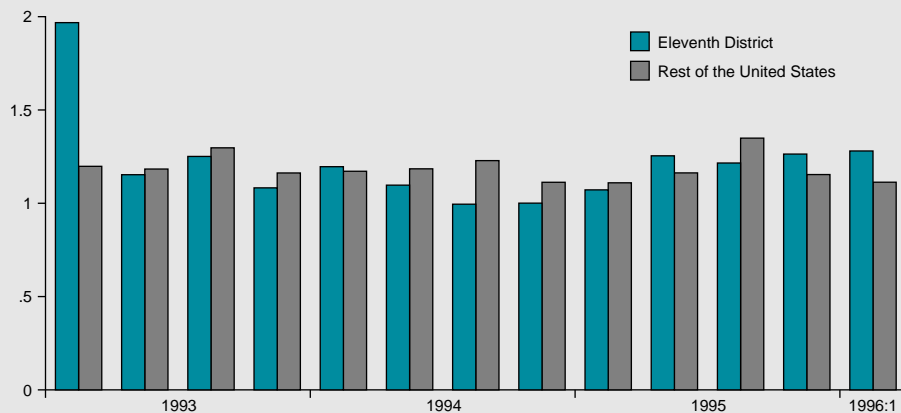
For banks outside the District, the first-quarter return on average assets was 1.11 percent, roughly even with the year-earlier value.

District profitability received a boost from higher noninterest income and lower overhead expense, a decline that can be attributed partly to lower FDIC premiums. Noninterest income rose to 1.83 percent of average assets through the first quarter of 1996 from 1.74 percent a year earlier. Overhead expense declined 40 basis points to 3.57 percent of average assets.

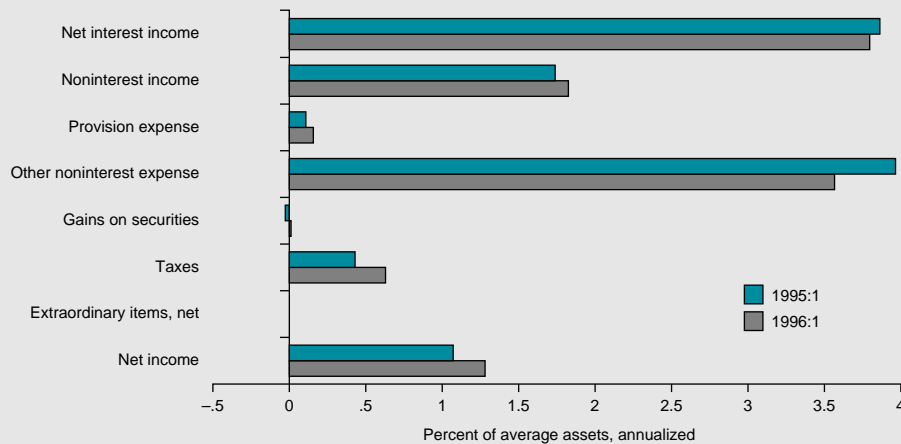
Together, these favorable movements were more than enough to offset increases in provision and income tax expenses. Provision expense rose 5 basis points to 0.16 percent of average assets, and income tax expense rose 20 basis points to 0.63 percent of average assets for the first quarter of 1996.

Return on Assets for Insured Commercial Banks

Percent, annualized



Major Profitability Components for Eleventh District Insured Commercial Banks



NOTE: The Eleventh District of the Federal Reserve System encompasses Texas, northern Louisiana and southern New Mexico.
 DATA SOURCE: Report of Condition and Income.

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