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# ◆ Regional Outlook ◆

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FDIC  
DALLAS  
REGION



DIVISION OF  
INSURANCE

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## In Focus This Quarter

◆ *Falling Prices in Commodities and Manufacturing Pose Continuing Risks to Credit Quality*—Falling prices are causing problems for a wide range of *commodity industries*—a collection of agricultural, mining, and manufacturing industries that produce standardized products and face global competition, mostly on the basis of price. Firms in these industries have experienced slow or negative profit growth even as they reduce payrolls to cut costs. There are signs that these trends are contributing to higher credit risk for insured institutions. The effects of these problems on local economies and community banks could grow if low prices persist. *See page 3.*

*By Richard A. Brown and Alan Deaton*

◆ *Shifting Funding Trends Pose Challenges for Community Banks*—Several long-term trends are making it more difficult for some institutions to economically fund asset growth with deposits in today's marketplace. As a result, traditional measures of liquidity and liability composition for commercial banks reflected record-low levels of deposit funding at year-end 1998. The need to augment lagging deposit growth to meet loan demand has led many community banks to seek more wholesale funding sources, particularly borrowings. If the trend toward greater reliance on nondeposit funding continues, liability management may become more important and more challenging for community banks that have historically relied upon deposits for funding and net interest revenues for profitability. *See page 11.*

*By Allen Puwalski and Brian Kenner*

## Regional Perspectives

◆ *Signs Emerge of a Moderating Regional Economy*—Employment growth remains strong in the Region but is expected to slow during the second half of this year...Agricultural producers face continuing stress that, if prolonged, may begin affecting farm banks' loan quality and earnings...Dallas Region banks and thrifts reported good, but somewhat weaker, operating results for the first quarter of 1999. *See page 18.*

◆ *Banks and Thrifts Report Strong, but Somewhat Weaker, Performance in First Quarter*—Commercial banks rely heavily on deposit funding relative to the rest of the nation and enjoy an extraordinarily low cost of funds because of a high percentage of non-interest-bearing deposits. *See page 21.*

*By the Dallas Region Staff*

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## *Falling Prices in Commodities and Manufacturing Pose Continuing Risks to Credit Quality*

- **Prices have fallen sharply across a wide range of commodities and manufactured goods.**
- **Signs of stress are apparent in some industry sectors.**
- **These trends are contributing to rising credit risk for insured institutions.**
- **Effects on local economies and community banks could grow if low prices persist.**

The performance of the U.S. economy during the mid- to late-1990s has been generally positive for banking. Economic activity grew in 1998 at an inflation-adjusted rate of 3.9 percent for the second consecutive year. Continued low inflation has helped to hold interest rates low and extend the expansion into its ninth consecutive year. However, one downside of low inflation has been that firms in certain commodity industries have encountered slow or negative growth in revenues because of the low prices they receive for their products.

Commodity industries are defined in this article as a collection of agricultural, mining, and manufacturing industries that produce standardized products and face global competition, mostly on the basis of price. Since the beginning of 1997, price weakness has extended across a wide range of commodity industries, from agricultural products to oil, chemicals, textiles, paper, semiconductors, steel, and even some segments of the auto industry. While many firms have retooled and restructured to cut costs, clear signs of financial stress have become apparent.

The potential importance of problems in commodity industries to the FDIC was illustrated by the banking problems related to oil and agriculture during the 1980s and early 1990s. As documented in a 1997 study by the *FDIC Division of Research and Statistics*, regional economic dislocations related to declining farmland values and declining oil prices contributed to large increases in credit losses and the eventual failure of hundreds of federally insured banks and thrifts. The analogy to the 1980s is far from perfect—for example, oil and agriculture have not experienced booms comparable to those that preceded their collapse in the

1980s—but exposures to commodity industries remain important for many insured institutions.

This article summarizes recent adverse trends in commodity and manufacturing sectors and discusses why industry-sector problems are important in banking. It takes a high-level approach, emphasizing the economic fundamentals that are driving prices across the economy while ignoring many of the industry-specific factors that are also driving the performance of individual sectors. The goal is to evaluate the effects of these trends on bank credit quality if they persist through 1999 and beyond.

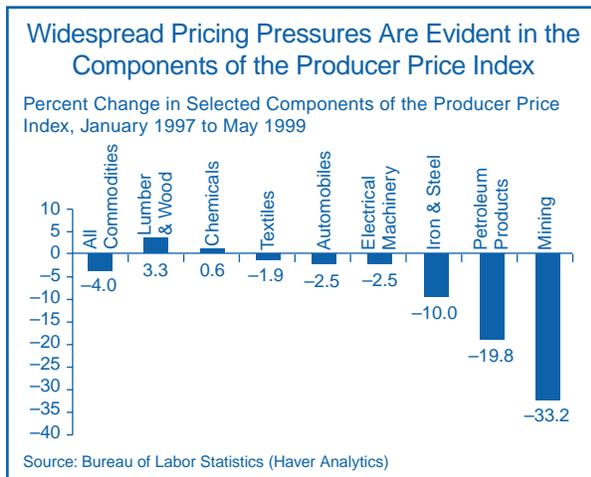
### *Prices Have Been Declining across a Range of Commodities and Manufactured Goods*

Low inflation has been a boon for consumer spending and business investment during the economic expansion of the 1990s. As of March 1999, the Consumer Price Index had risen at an annualized rate of less than 2.0 percent for 8 consecutive quarters and at an annualized rate of less than 4.0 percent for 33 consecutive quarters. The prices of many popular and essential consumer goods—from computers to gasoline—have generally fallen throughout the decade, even as the prices of most services continue to rise steadily. Businesses, too, have benefited from the ability to purchase goods cheaply, as well as from the generally low interest rates that have accompanied low inflation.



The declining average wholesale price of goods is reflected in Chart 1 (next page), which shows changes in the producer price index (PPI) and some of its key components since the beginning of 1997. The PPI focuses on goods, omitting changes in the price of services. The decline of nearly 5 percent in the PPI since the beginning of 1997 has been led by falling prices for mining products, petroleum, and steel. Moreover, economy-wide price declines for wholesale goods have been steady over time, with the PPI registering year-over-year declines for 26 consecutive months through May 1999.

CHART 1



Although they are only indirectly included in the PPI numbers, the prices of several important agricultural commodities have also fallen substantially. Chart 2 shows that the price of wheat has fallen by more than 35 percent since January 1997, with the price of corn, hogs, and cotton also registering double-digit rates of decline. While the price of hogs has rebounded significantly since the end of 1998—more than doubling from its low of less than 15 cents per pound—prices for corn, wheat, and cotton continued to decline through May 1999.

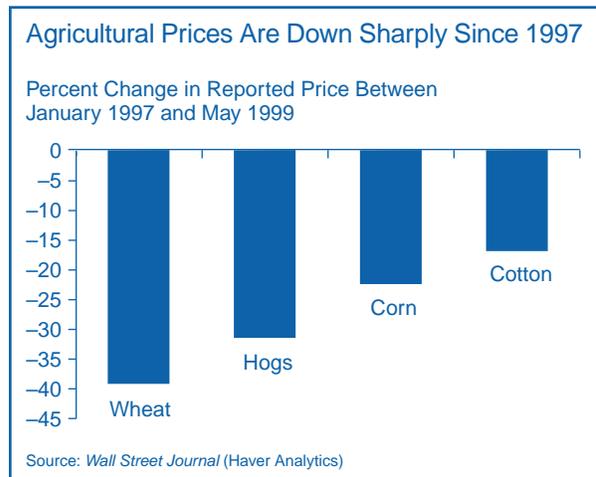
**Reasons for Broad-Based Commodity Price Weakness**

Pricing trends in disparate industries such as electronics and agriculture, or oil and steel, are driven in part by industry-specific factors. For example, weather patterns heavily influence agricultural prices, while global politics tends to drive world oil price levels. In manufacturing, technological developments can significantly alter the demand for a product or its cost of production, thereby influencing its market price. For example, improvements in semiconductor manufacturing techniques—from shrinking the size of chips to using larger silicon wafers—have significantly increased production yields in that industry during the 1990s.<sup>1</sup>

However, the pervasiveness of recent price declines across a wide range of commodities and manufactured

<sup>1</sup> See “Semiconductor Industry Trends,” *Standard and Poor’s Industry Surveys*, May 27, 1999, p. 4.

CHART 2



goods suggests that a number of common factors are driving prices lower:

- **Low inflationary expectations.** Since 1980, inflation rates have gradually declined worldwide as central banks shifted their focus toward price stability. *Disinflation* has profoundly altered the expectations of investors, consumers, and businesses, and in the process has altered the course of events in individual markets and in the economy as a whole. As a result, commodities have lost much of their appeal as a hedge against inflation. This has contributed to a decline of more than 50 percent in the price of gold since 1980. The expectations of many businesses have also changed, because with less pricing power they must continually cut costs to remain competitive.
- **Overcapacity because of large-scale investment.** Global investment in productive capacity accelerated during the early to mid-1990s in a number of commodity and manufacturing industries. Many U.S. firms have implemented new technologies and moved their operations closer to their markets or to areas where low-cost labor is available. For example, major U.S. and foreign automakers have invested billions of dollars in recent years in new production facilities in the emerging markets of Asia and Latin America as part of a “build-where-you-sell” strategy.<sup>2</sup> Because these additions to capacity largely have not been offset by the closure of existing plants, analysts say that global productive capacity in autos

<sup>2</sup> Barbara McClellan, “Asia Woes Worsen,” *Ward’s Auto World*, November 1998, pp. 28–31.

could exceed demand by more than 20 million units annually by 2000.<sup>3</sup> A similar situation has developed in the semiconductor industry, where capital investment in chipmaking equipment tripled between 1993 and 1996, contributing to a glut of memory chips and plunging prices.<sup>4</sup>

- Curtailed global demand in the wake of emerging market crises.** The economic crises that have developed in Asia, Russia, and parts of Latin America since 1997 have crimped global demand for commodities and manufactured goods. For example, demand for new cars in Korea fell by 50 percent in 1998.<sup>5</sup> Asia received approximately 30 percent of U.S. feed grain exports in 1996, but declining Asian demand since then has contributed to a sharp decline in global grain prices. The slowdown of economic activity in crisis countries and the resulting decline in their demand for imports is only one factor that has hurt the pricing power of U.S. producers. Another problem is the pricing advantage conferred on countries that have experienced currency devaluation. Firms operating in a country that has devalued its currency experience a reduction in the price of their exports in U.S. dollar terms. This process further depresses the pricing power of U.S. farmers and businesses that sell their goods in global markets.

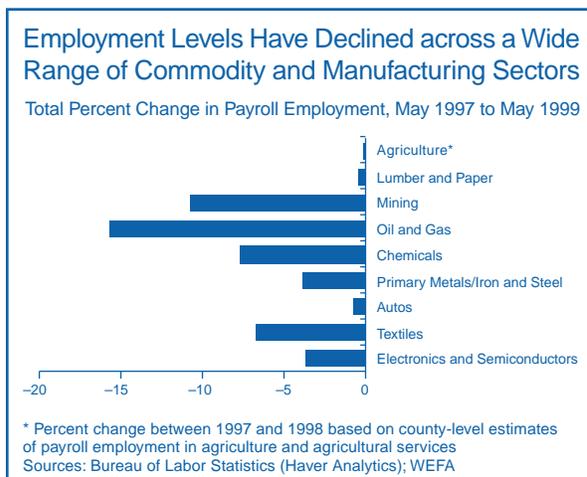
Recently, there have been signs that some hard-hit Asian economies may soon begin to recover. However, the other factors cited above—low inflationary expectations and rapid investment in productive capacity—may well be longer-term trends. In any event, U.S. farmers and businesses that participate in commodity industries must be prepared for the possibility that pricing pressures will not dissipate in the near term.

***Signs of Stress Are Showing for Affected Industry Sectors***

As commodity prices continue to stagnate, signs of stress are emerging among firms in the commodity industries. A long-term trend toward reduced levels of employment in manufacturing has accelerated in the midst of the current economic expansion. Chart 3 shows that employment levels declined in a wide range of commodity industries in the 24 months ending in May

<sup>3</sup> "1997 Automotive Outlook," *Automotive Industries*. This report is available at <http://www.ai-online.com>.  
<sup>4</sup> "Semiconductor Industry Trends" (1999), p. 3.  
<sup>5</sup> Barbara McClellan (1998).

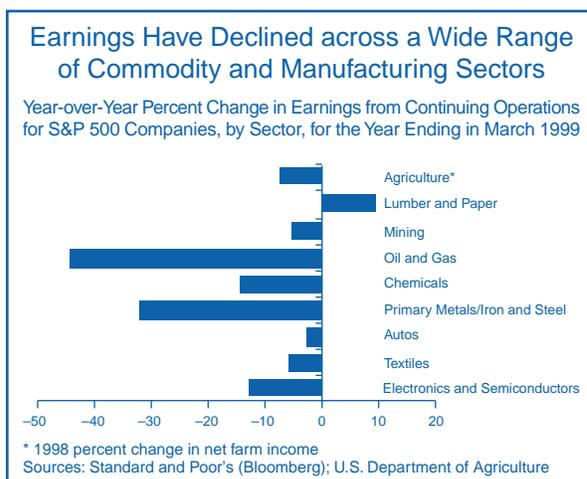
**CHART 3**



1999. The total manufacturing sector lost more than 420,000 jobs during that period, while another 64,000 jobs were lost in the mining sector, which includes oil and gas extraction. The trend toward lower levels of employment in mining and manufacturing not only reflects pricing pressures but also attempts by firms in these sectors to maintain profitability by investing in labor-saving technologies.

The profit picture has begun to deteriorate as well for firms operating in commodity industries. Four-quarter trailing earnings through March 1999 for oil-sector firms in the Standard & Poor's 500 dropped by more than 44 percent from a year ago (see Chart 4), while the earnings of steel firms fell by almost 32 percent. The losses experienced by firms in some of these industrial sectors extended to the farm sector as well, where net

**CHART 4**



incomes fell by more than 7 percent in 1998, according to the *U.S. Department of Agriculture*.

### *Affected Industries Have Found Ways to Cope with Pricing Pressures Thus Far*

Despite the signs of stress in industries where prices are weak or declining, U.S. farmers and industrial firms have shown themselves to be fairly resilient thus far in their ability to cope with the situation. Agricultural producers have been making greater use of carryover debt to keep their operations running even if they were not able to fully retire their operating loans during the previous crop year. The *FDIC Report on Underwriting Practices* shows that 29 percent of FDIC-supervised agricultural lenders reported at least a moderate increase in carryover debt during the six-month period ending in March 1999, compared with only 10 percent in March 1998. Although the use of carryover debt is not an uncommon practice in agriculture, it indicates that low prices and declining subsidies have contributed to financial stress for farmers.

Many industrial firms have found ways to increase productivity and cut costs to offset declining revenues. Chart 5 follows trends in annual total revenue and costs for U.S. corporations operating in a selected group of commodity industries. It shows that growth in revenue and costs slowed noticeably in 1997. Both revenue and costs in these sectors declined in 1998, illustrating that firms in these sectors have needed to cut costs to preserve profit margins. Cost cutting in the manufacturing sector is further illustrated by a steady decline in the index of unit labor costs for manufacturing, which started from a value of 100 in 1992 and fell to less than 96

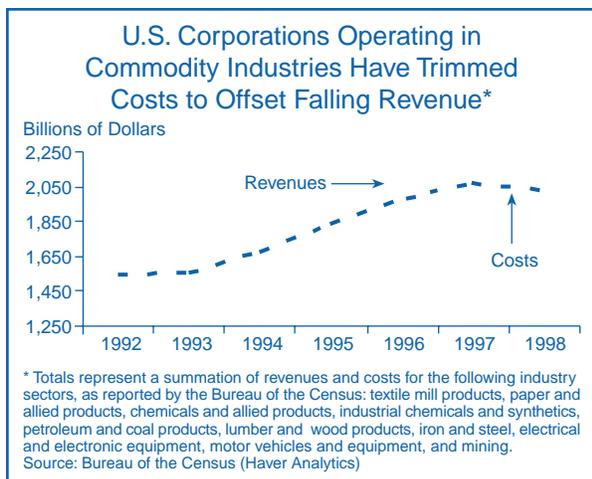
by the first quarter of 1999. Falling unit labor costs means that the productivity of manufacturing workers is rising faster than the cost of their services. This trend demonstrates that manufacturing firms have been successful at implementing new technologies and new capital equipment to cut production costs.

Cost savings and industry consolidation have been accomplished in part through mergers. According to *Merger Stat*, the dollar volume of merger and acquisition transactions involving U.S. firms exceeded \$1.2 trillion in 1998, an increase of more than 80 percent from 1997 levels. Both the number and dollar volume of mergers announced in 1998 far exceeded the volumes recorded during the “merger mania” of the 1980s. Some of the largest mergers announced in 1998 involved firms looking for ways to increase market share and cut costs in markets characterized by overcapacity. Examples include the \$39 billion Daimler-Chrysler transaction announced in May 1998 and the \$80 billion Exxon-Mobil transaction announced in December 1998. Furthermore, merger activity recorded in early 1999 suggests that total merger volume for the year could exceed the record pace of a year ago.

Industries plagued by oversupply and weak prices require consolidation to reduce capacity and improve profit margins. Mergers and acquisitions represent a fairly orderly way for firms operating in a troubled industry to consolidate on their own terms. Bankruptcy filings are an alternative means for severely troubled firms to reduce capacity and achieve consolidation within an industry. Regardless of how industry consolidation is achieved, it often results in reductions in employment (such as those documented in Chart 3). However, from a lender’s perspective, an orderly consolidation process through mergers and acquisitions is preferable to a disorderly shakeout of firms through bankruptcies.

Recent favorable capital market conditions have allowed firms in troubled industries to consolidate through mergers. Acquisitions are sometimes financed through corporate borrowings or, more commonly, by swapping equity shares that have been rising in value during the bull market of the 1990s.<sup>6</sup> Recent consolidation in commodity industries could be depicted as an

**CHART 5**



<sup>6</sup> According to Loan Pricing Corporation’s *Gold Sheets*, syndicated and leveraged lending related to mergers and acquisitions reached a record high of \$80 billion in the second quarter of 1998, which represents about 30 percent of the total syndicated and leveraged lending market for that period.

orderly process, associated with record-high merger and acquisition activity, near-record-low business bankruptcy filings, and low credit losses on commercial and industrial (C&I) loans. However, a sudden change in financial market conditions characterized by sharply higher interest rates, lower stock values, or both could inhibit the ability of businesses to restructure and retool on their own. This could lead to a much more disorderly shakeout of firms accompanied by a rise in business bankruptcies and losses to lenders.

**Signs Point to Rising Credit Risk in the Commodity Industries**

In dollar terms, the largest commercial bank exposures to the commodity industries are in the portfolios of large banks. Chart 6 provides an estimated breakdown of the aggregate exposure of insured institutions to commodity industries based on corporate balance sheet information collected by the Bureau of the Census.<sup>7</sup> The chart shows that the aggregate exposure of the bank and thrift industries to these sectors is approximately \$206 billion, or 26 percent of the total industry C&I portfolio. The largest single industry exposure is to the chemical industry, which represents approximately 9.5

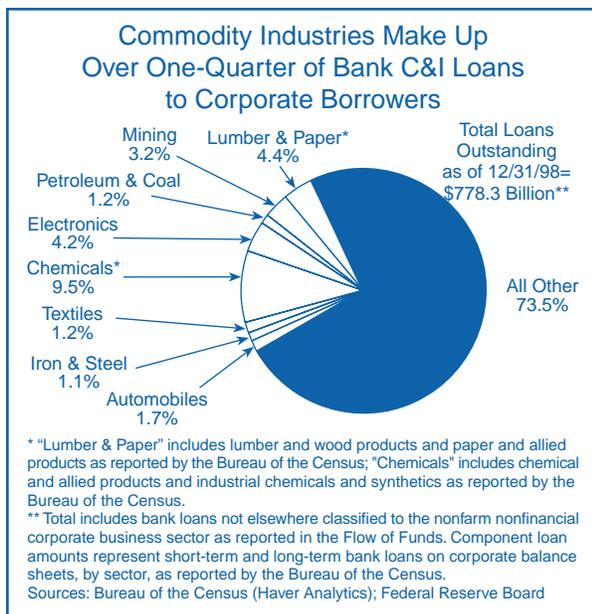
percent of bank C&I loans. In the syndicated loan market, where large U.S. banks dominate in terms of originations, about 25 percent of all loans made in 1998 were to firms operating in the manufacturing sector.

A rough indicator of recent trends in the credit risk associated with bank loans to commodity industries can be found in expected default frequencies (EDFs) calculated by KMV Corporation. The EDF is an estimate of the probability that a firm will default on its bond obligations within one year.<sup>8</sup> Chart 7 tracks the median EDF for firms operating in commodity industries compared with the median for all other firms rated by KMV. This chart shows that while the median EDF for commodity industries has consistently exceeded the median for all other firms in the recent past, this difference has widened appreciably since the middle of 1998. Over the past year, the median EDF for commodity industries has more than doubled, rising from 0.8 percent to 1.9 percent, while the median EDF for all other firms has doubled as well, from 0.6 percent to 1.2 percent. These data indicate that the level of credit risk associated with corporate borrowers has been increasing, led by an increased probability of default among firms operating in commodity industries.

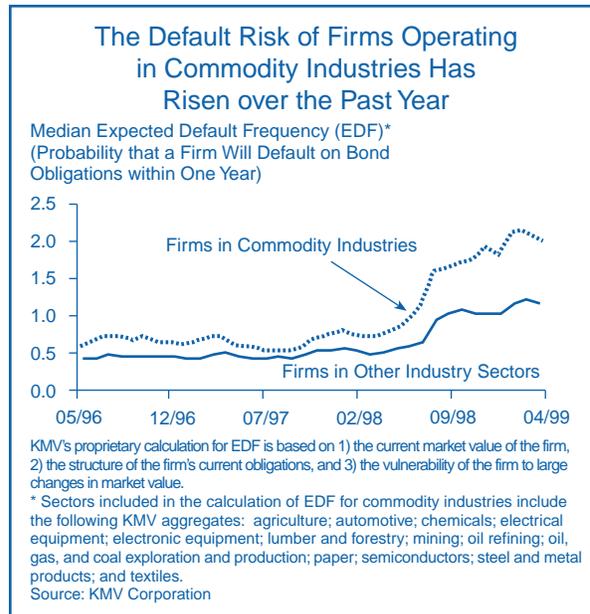
<sup>7</sup> Because of the limitations of the data, bank exposures to corporations engaged in agriculture are not broken out in Chart 6.

<sup>8</sup> KMV's proprietary calculation for EDF is based on 1) the current market value of the firm, 2) the structure of the firm's current obligations, and 3) the vulnerability of the firm to large changes in market value.

**CHART 6**



**CHART 7**



**Effects on Local Economies and the Banks That Operate in Them**

The economic effects of adversity in commodity industries tend to be most severe in local areas that depend heavily on these sectors for employment and income. In the 1980s, problems in the agricultural and oil sectors kicked off a “rolling recession” that spread through the Plains states and oil-producing regions of the south-central and western states. In agricultural regions, farmland values began to decline around 1981, contributing to the failure of hundreds of FDIC-insured banks between 1984 and 1990.<sup>9</sup> Similarly, declining oil prices in the mid-1980s contributed to the failure of federally insured banks and thrifts in Texas, Oklahoma, Louisiana, and other states, while the attempts of some institutions to diversify into risky real estate investments resulted in still more failures. The FDIC’s analysis of these episodes emphasizes how industry-sector problems can affect local economies and bank credit quality.<sup>10</sup> Moreover, the study shows that there can be a significant lag between the onset of industry-sector problems and the emergence of performance problems

<sup>9</sup>Federal Deposit Insurance Corporation, Division of Research and Statistics (1997). *History of the Eighties: Lessons for the Future, Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s.* pp. 275–276, <http://www.fdic.gov/databank/hist80/index.html>.

<sup>10</sup>Federal Deposit Insurance Corporation (1997). See Chapters 8 and 9.

in the banking industry. Although banks with direct credit exposures to a troubled industry are likely to be affected first, virtually all banks that operate in areas that are heavily dependent on a troubled sector will eventually have to contend with the indirect effects on the local economy.

To evaluate the extent of local economic effects that might have resulted from the recent adverse trends in the commodity industries, we have conducted analysis on 1,027 U.S. counties identified as particularly dependent on at least one commodity industry (see Table 1 for a list of the commodity industries studied).<sup>11</sup> The purpose of this analysis is not to identify every county that might be affected by these trends; instead, this analysis focuses on the U.S. counties *most concentrated* in the commodity industries and determines if these counties and banks that operate in them are showing any symptoms of widespread distress.

Table 2 compares 1998 average job growth and unemployment rates in these “most concentrated counties” against the average for all U.S. counties. This comparison shows that the concentrated counties tended to have moderately lower job growth and higher unemployment than the U.S. average. However, further analysis shows

<sup>11</sup> Counties identified as being highly dependent on one or more commodity industries had an average population of 36,250 in 1998 versus 86,055 for all U.S. counties.

**TABLE 1**

U.S. COUNTIES MOST CONCENTRATED IN COMMODITY INDUSTRIES BY 1998 PAYROLL EMPLOYMENT			
	PERCENT OF 1998 COUNTY EMPLOYMENT IN THE INDUSTRY	NUMBER OF COUNTIES WITH EMPLOYMENT CONCENTRATION IN 1998	STATES WITH THE MOST DESIGNATED COUNTIES
AGRICULTURE	>30	295	TX, NE, SD, KS, MO
LUMBER AND PAPER	>5	305	GA, AL, MS, AR
OIL AND GAS	>5	83	TX, OK, LA
CHEMICALS	>5	46	TN, IL, NC, TX
STEEL	>5	70	KY, OH, AR, IN
AUTOS	>5	118	MI, IN, OH, KY, TN
TEXTILES	>5	156	GA, NC, SC, VA, AL
ELECTRONICS AND SEMICONDUCTORS	>5	33	TX, NY, IN, IA
ANY COMMODITY INDUSTRY	N/A	1,027	TX, GA, NC, TN, AL
ALL U.S. COUNTIES	N/A	3,142	N/A

SOURCE: WEFA, BASED ON DATA FROM THE BUREAU OF LABOR STATISTICS

**TABLE 2**

RELATIVE ECONOMIC PERFORMANCE OF COUNTIES MOST CONCENTRATED IN COMMODITY INDUSTRIES		
	1998 AVERAGE EMPLOYMENT GROWTH (%)	1998 AVERAGE UNEMPLOYMENT RATE (%)
AGRICULTURE	1.1	4.8
LUMBER AND PAPER	1.3	6.9
OIL AND GAS	1.4	5.6
CHEMICALS	1.3	6.0
STEEL	1.7	5.6
AUTOS	1.8	4.4
TEXTILES	0.9	5.1
ELECTRONICS AND SEMICONDUCTORS	1.9	3.7
ANY COMMODITY INDUSTRY	1.3	5.5
ALL U.S. COUNTIES	1.6	5.1

SOURCE: BUREAU OF LABOR STATISTICS, HOUSEHOLD SURVEY (HAVER ANALYTICS)

that the current situation is not unusual in that job markets in concentrated counties have tended to consistently underperform other U.S. counties over the past two decades. On the whole, the economic picture did not noticeably deteriorate in 1998 for the concentrated counties. Average unemployment declined in 1998 for every group of concentrated counties except oil counties, and average job growth increased in every group of counties except textile counties. These data indicate that while recent problems in the commodity industries might be having severe effects in specific areas, these problems had not translated into a broader weakening of economic performance through the end of 1998.

The financial performance of insured institutions operating in concentrated counties is evaluated in Table 3 (next page). The table provides average C&I loan performance and profitability ratios for 1,915 banks and thrifts identified as having at least 25 percent of their deposits in at least one of the concentrated counties as of June 1998.<sup>12</sup> The average C&I loan charge-off ratio for concentrated counties overall was higher than the U.S. average, driven largely by higher average charge-

offs in both agricultural and oil and gas counties. Comparisons of past-due and noncurrent C&I loans also indicate that institutions operating in agricultural and oil and gas counties tend to have more problem credits than the U.S. average.<sup>13</sup> During the 12 months ending in December 1998, the average noncurrent loan ratio jumped from 4.8 percent to 6.1 percent for institutions operating in agricultural counties, while the average ratio rose from 2.7 percent to 3.8 percent for institutions operating in oil and gas counties.

These results indicate that while profitability in 1998 remained solid for the average bank operating in concentrated counties, credit losses appeared to be on the rise in agricultural and oil and gas counties. However, because this analysis relies on annual data that extend only through 1998, it is by design a backward-looking test for the local effects of problems in the commodity industries. There is every reason to expect these credit problems to intensify over time if commodity prices remain low.<sup>14</sup> These considerations suggest that bankers in commodity-dependent counties should continually

<sup>12</sup> This analysis identifies the location of deposits by county through the Summary of Deposits report for June 1998, the most recent report available. The analysis is limited to institutions reporting at least \$1 million in C&I loans as of December 31, 1998. Institutions operating in one or more concentrated counties and meeting all the selection criteria averaged \$195 million in total assets as of December 31, 1998, compared with an average of \$733 million in assets for institutions operating in any U.S. county.

<sup>13</sup> Past-due loans are defined as loans that have been past due for 30 to 89 days. Noncurrent loans are defined as loans that have been past due for 90 or more days plus loans placed in nonaccrual status.

<sup>14</sup> For more information on how the agricultural outlook could affect FDIC-insured institutions, see the statement of FDIC Chairman Donna Tanoue to the Committee on Agriculture, U.S. House of Representatives, February 12, 1999, <http://www.fdic.gov/publish/speeches/99spchs/spc13apr.html>.

**TABLE 3**

RELATIVE FINANCIAL PERFORMANCE OF INSURED INSTITUTIONS OPERATING IN COUNTIES MOST CONCENTRATED IN COMMODITY INDUSTRIES					
INCLUDES ONLY INSURED INSTITUTIONS WITH AT LEAST \$1 MILLION IN C&I LOANS	NUMBER OF BANKS WITH AT LEAST 25% OF DEPOSITS IN A DESIGNATED COUNTY	AVERAGE C&I LOANS PAST DUE 30 TO 89 DAYS, AS PERCENT OF LOANS, 12/31/98	AVERAGE NONCURRENT C&I LOANS, AS PERCENT OF LOANS, 12/31/98	AVERAGE NET C&I LOAN CHARGE-OFFS, AS PERCENT OF AVERAGE LOANS, 1998	AVERAGE RETURN ON ASSETS, 1998
AGRICULTURE	416	5.08	6.12	1.58	1.16
LUMBER AND PAPER	465	3.38	1.89	0.78	1.21
OIL AND GAS	163	3.44	3.78	1.18	1.29
CHEMICALS	81	2.47	2.97	0.79	1.18
STEEL	186	2.53	2.06	0.59	1.08
AUTOS	341	2.64	2.05	0.66	1.12
TEXTILES	264	2.91	1.92	0.70	1.10
ELECTRONICS AND SEMICONDUCTORS	107	2.71	2.36	0.68	0.87
ANY COMMODITY INDUSTRY	1,915	3.39	3.03	0.93	1.13
ALL U.S. COUNTIES	8,485	2.91	2.50	0.76	1.05

NONCURRENT LOANS INCLUDE LOANS PAST DUE 90 OR MORE DAYS PLUS LOANS PLACED ON NONACCRUAL STATUS.  
 C&I = COMMERCIAL AND INDUSTRIAL.  
 SOURCES: SUMMARY OF DEPOSITS, DIVISION OF RESEARCH AND STATISTICS, FDIC; BANK AND THRIFT CALL REPORTS (RESEARCH INFORMATION SYSTEM)

monitor their local economy for signs of stress related to problems in the commodity industries.

**Conclusion**

Businesses operating in a range of commodity and manufacturing industries continue to grapple with weak or declining prices. This problem is not solely the result of industry-specific factors; it is part of long-term economic trends that may continue for some time. Signs of stress among firms in these industries are apparent in the form of declining levels of employment and slow or negative profit growth. However, there are few signs to date of any disorderly industry shakeouts involving widespread business bankruptcies and losses to lenders. Thus far, most firms have managed to cope with the situation by cutting costs and consolidating operations through mergers. At the same time, more forward-

looking indicators show that the level of credit risk associated with commodity industries may be on the rise. An analysis of the U.S. counties most heavily dependent on these industries showed few signs of a widespread deterioration in the performance of their economies or in the profitability of their local depository institutions through the end of 1998. However, there are signs of rising credit losses among local depository institutions in counties with the highest concentrations of agriculture and oil and gas extraction. A continuation of today's weak pricing picture in these industries has the potential to result in higher credit losses for insured institutions during the next few years.

*Richard A. Brown, Chief,  
 Economic and Market Trends Section  
 Alan Deaton, Economic Analyst*

## *Shifting Funding Trends Pose Challenges for Community Banks*

- **Several long-term trends are making it more difficult for some institutions to economically fund asset growth with deposits in today's marketplace.**
- **Lagging deposit growth in recent years has resulted in greater reliance on alternative funding sources to meet loan demand.**
- **Liability management may become more important and more challenging for community banks that have historically relied upon deposits for funding and net interest revenues for profitability.**

For the past few years, assets have been expanding faster than deposits at many commercial banks. The result is an increased reliance on equity and borrowings for funding. Since 1992, commercial bank assets have grown at an average annual rate of 6.3 percent compared with a 3.9 percent average annual growth rate for deposits. Traditional measures of liquidity and funding for commercial banks reflected record-low levels of deposit funding at year-end 1998. Large commercial banks have traditionally made greater use of nondeposit funding alternatives. However, many community banks,<sup>1</sup> which have typically relied more on deposit funding, may face liability management challenges as a result of shifting funding trends. This article surveys the factors influencing the ability of banks to fund loan growth with deposits, discusses community bank funding trends, and considers the implications of these trends for community banks.

### ***Factors Influencing Deposit Funding Trends***

The percentage of commercial bank assets, particularly loans, funded with deposits has declined steadily in the 1990s. As shown in Chart 1, the industry's ratios of deposits to assets and loans to deposits reflect a longer-term shift away from deposit funding. Although the level of these industry ratios is heavily influenced by larger banks, the trend toward lower deposit funding exists for both large banks and community banks and points to secular factors that are affecting banks' ability to raise deposits in step with asset growth.

<sup>1</sup> Defined here as banks with total assets of \$1 billion or less.

### **Trends in Household Wealth Accumulation**

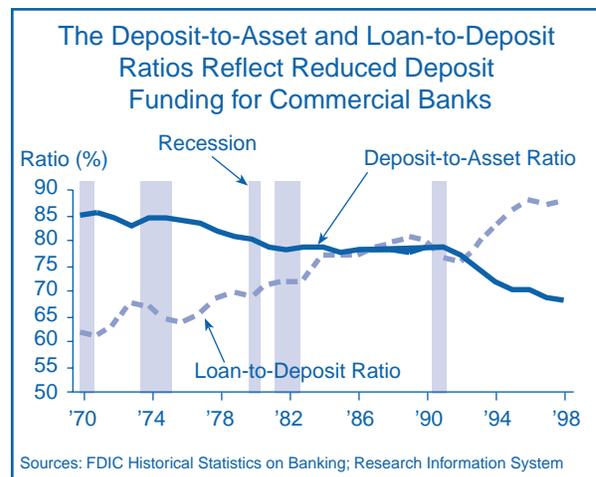
One factor affecting the ability of banks to attract deposits is the recent trend in the way households are amassing wealth. While the total wealth of U.S. households has soared in recent years because of unrealized capital gains on housing and investments, annual net purchases of new financial assets<sup>2</sup> by households as a percentage of disposable income have actually trended downward since the mid-1980s (see Chart 2, next page). A falling personal savings rate and fewer purchases of financial assets may suggest that households are more comfortable consuming a higher percentage of current income as long as capital gains are adding to their accumulated wealth. However, because households have been setting aside less of their current income for savings, the pool of new funds available to purchase bank deposits has been growing more slowly.

### **Higher-Yielding Investment Alternatives**

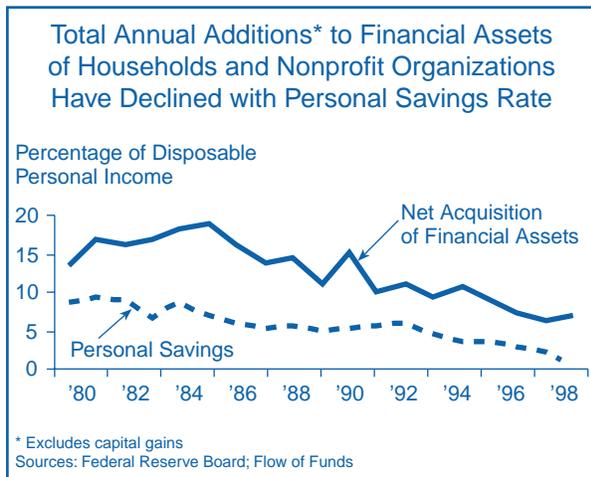
At the same time that households have been setting aside less of their current income for savings, the share of total new household savings flowing into bank deposits has declined in the 1990s as competition from higher-yielding alternatives has increased. During the 1980s, over 30 percent of the cumulative net increase in

<sup>2</sup> Financial assets are defined as deposits, money market and mutual fund shares, credit market instruments, corporate equities, life insurance reserves, pension fund reserves, and trust reserves.

**CHART 1**



**CHART 2**



financial assets by households and nonprofit organizations flowed into deposits. In contrast, less than 15 percent of the cumulative net increase in financial assets has flowed into deposits during the 1990s, although an increasing proportion has been allocated to deposits in recent years.

Not only do banks face intensifying competition from other banks and thrifts, as indicated by 66 percent of the respondents in *Grant Thornton's 1999 Sixth Annual Survey of Community Bank Executives*,<sup>3</sup> but they also

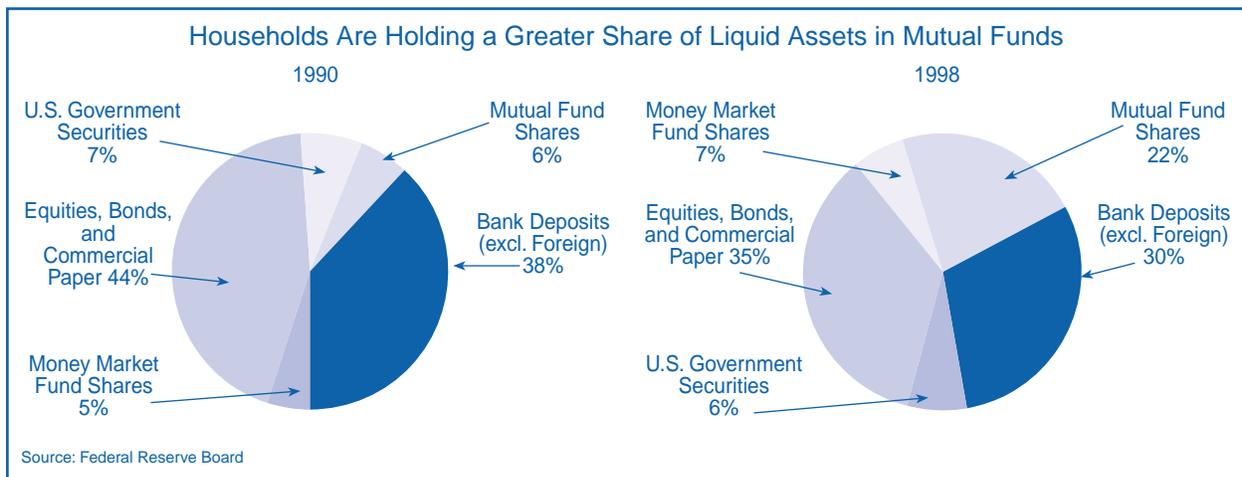
<sup>3</sup> Grant Thornton's 1999 Sixth Annual Survey of Community Bank Executives, "Community Banks: A Competitive Force," <http://www.grantthornton.com/resources/finance/banksurvey99/survey99w.html>.

face increasing competition from mutual funds and other nonbank financial service providers, such as credit unions.

**Mutual Funds.** Increasingly, consumers are pursuing higher yields by investing in mutual funds. Beyond yields, however, many mutual fund companies also are competing effectively with banks on the basis of convenience by offering money market accounts that allow check writing, automated teller machine cards, and check cards. Chart 3 shows the changes in the composition of household liquid assets during the 1990s. In 1990, bank deposits constituted 38 percent of households' liquid assets versus 11 percent for mutual funds and money market funds; at year-end 1998, the shares were nearly even. While some of the change in composition can be explained by rising mutual fund share prices, other measures indicate a shifting preference for mutual funds as a savings vehicle. For example, data from the *Investment Company Institute* show that net inflows into mutual funds have exceeded net increases in insured institution deposit accounts in all but three quarters during this economic expansion. Moreover, the first quarter of 1999 marked the seventeenth consecutive quarter that mutual fund inflows outstripped increases in deposits for all FDIC-insured institutions.

**Credit Unions.** In addition to mutual funds, credit unions also are formidable competitors for consumer savings. Membership in credit unions has increased more than 20 percent over the past decade, while deposits and share accounts have risen by over 90 per-

**CHART 3**



cent.<sup>4</sup> Credit unions also offer federal insurance on share accounts as well as competitive rates on comparable deposit-type vehicles relative to other types of financial institutions. For example, according to information from the *National Credit Union Association*, on average, credit unions have offered rates on one-year share certificates in excess of one-year bank certificates of deposit in nine of the past ten years. As shown in Chart 4, average rates paid by credit unions on one-year share certificates over the 12 months ending May 1999 were consistently higher than rates offered by banks or thrifts and approached retail rates offered by brokerages.

**Demographic Shifts**

Some analysts maintain that rural community banks face additional funding challenges as a result of demographic shifts. According to the *Federal Reserve Bank of Kansas City*, rural bankers perceive that sluggish deposit growth is at least partially attributable to the migration of deposits to cities as urban-dwelling heirs of rural depositors relocate funds. While evidence for this deposit migration remains anecdotal, economists at the Federal Reserve Bank of Kansas City indicate that the demographic shift is still in process, and its full effect may not be felt for some time. Further challenging deposit growth for banks, additional evidence suggests that urban dwellers tend to place less of their

savings in banks than their rural counterparts do.<sup>5</sup> This trend poses additional consequences for bank deposits as rural populations migrate to suburban areas.

**Community Bank Funding Trends**

Community banks traditionally rely more heavily upon core deposit funding than larger banks do. For example, Chart 5 (next page) shows that 72 percent of aggregate community bank assets were funded with core deposits at year-end 1998. In contrast, 43 percent of aggregate large bank assets at year-end 1998 were funded with core deposits. This difference in liability structures reflects large banks' broader use of wholesale funding alternatives and greater access to capital markets instruments.

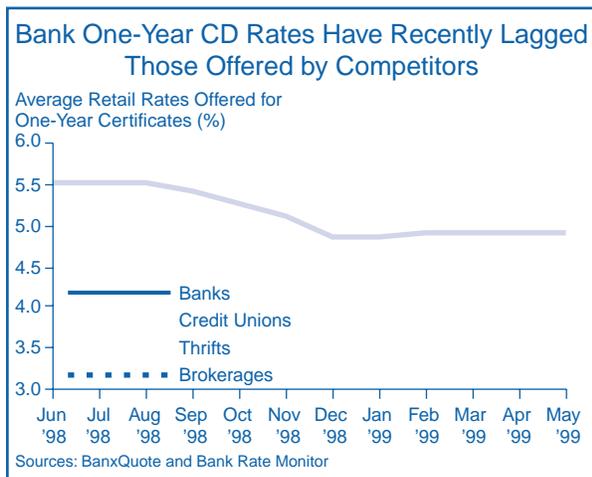
While large banks have responded to factors influencing deposit growth by making greater use of alternative funding sources, funding options for community banks tend to be more limited.



Because of high fixed costs, community banks may find it more difficult than larger institutions to make cost-effective use of capital market instruments such as securitizations or public debt and equity offerings (see *"Industry Consolidation Presents Unique Risks and Challenges for Community Banks," Regional Outlook, Fourth Quarter 1998*, for a discussion of additional non-deposit funding sources for community banks).

<sup>4</sup> Center for Credit Union Research, "Credit Union FAQ," <http://wiscinfo.doit.wisc.edu/bschool/cu/cufaq.html>.

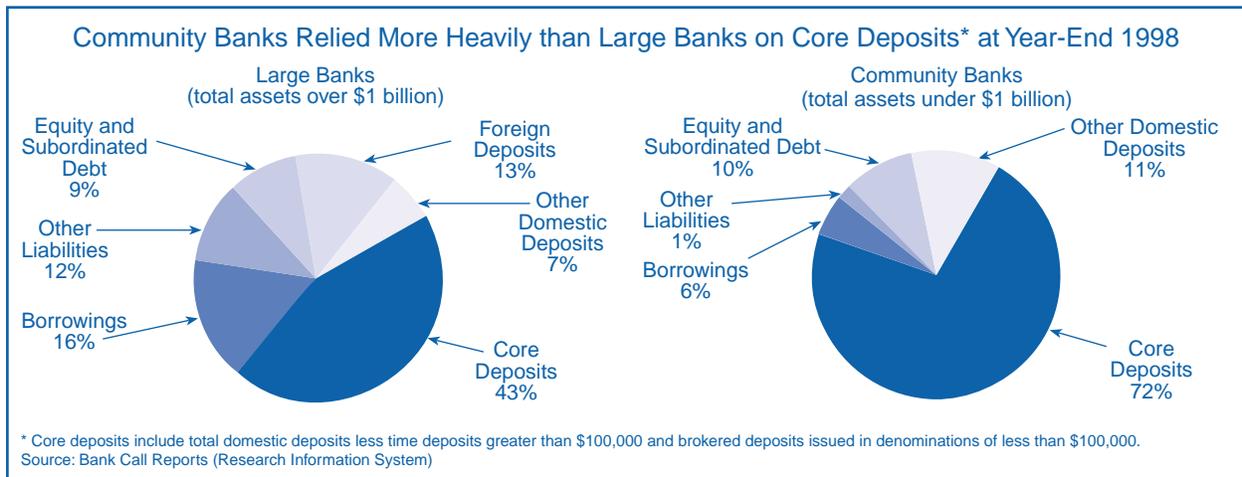
**CHART 4**



The need to augment lagging deposit growth to meet loan demand has led many community banks to acquire more noncore funds. These funds include time deposits greater than \$100,000, borrowings, foreign deposits, brokered deposits, and demand notes. At year-end 1998, nearly 75 percent of community banks held noncore liabilities representing 10 percent or more of total liabilities. As recently as 1993, only 42 percent of community banks exceeded that threshold. Moreover, over the same five-year period, the ratio of core deposits (defined here as total deposits less time deposits greater than \$100,000 and brokered deposits) to total deposits for all community banks declined each quarter.

<sup>5</sup> William R. Keeton, Federal Reserve Bank of Kansas City. "Are Rural Banks Facing Increased Funding Pressures? Evidence from Tenth District States." *Economic Review*, Second Quarter 1998, p. 56. Also see "Regional Banking," *Regional Outlook, Kansas City Edition*, Second Quarter 1998, p. 24.

CHART 5



As community banks' use of noncore funds has increased, they are relying more on federal funds purchased, repurchase agreements, other borrowings, demand notes, and mortgages (collectively referred to as borrowings). After adjusting for mergers, borrowings funded 12 percent of new community bank asset growth from 1992 through 1998—three times more than the percentage of new asset growth funded by borrowings from 1985 to 1990. Possibly reflecting a shift toward greater acceptance of wholesale funding by community bankers, growth in borrowings has been largely driven by increased use of nonovernight borrowings,<sup>6</sup> which have become the dominant form of borrowings at community banks. As shown in Chart 6, the proportion of community banks reporting nonovernight borrowings has doubled in the 1990s. This trend coincides with growing community bank membership in the Federal Home Loan Bank (FHLB) system and increasing use of FHLB borrowings.

**Federal Home Loan Bank Membership**

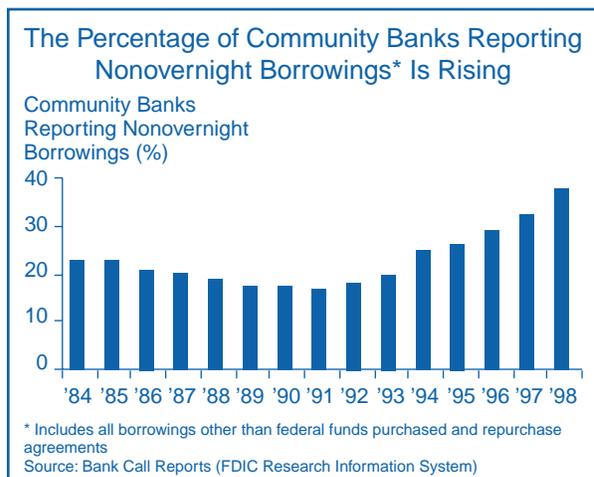
Over the past five years, community banks have substantially increased their membership and participation in the FHLB system. According to data from the *Federal Housing Finance Board*, for the five-year period ending in 1998, the percentage of FDIC-insured community banks that were members of the FHLB more than doubled to 50 percent. Over the same period, FHLB advances outstanding for community banks grew by more than 50 percent to \$47 billion. At year-end 1998,

<sup>6</sup> Nonovernight borrowings are defined here as all borrowings other than federal funds purchased and repurchase agreements.

FHLB advances represented approximately 80 percent of all nonovernight borrowings for community banks.

Analysts have cited a number of reasons why community banks are joining the FHLB system. Community banks are using FHLB advances to meet contingent liquidity needs, manage interest rate risk, fund new asset growth, and leverage capital to maintain or boost returns on equity. Recent surveys indicate that FHLB advances will continue to have a role in community bank liability management. Almost one-half of respondents to *Grant Thornton's 1999 Annual Survey of Community Bank Executives* considered FHLB borrowings an important funding source over the next three years, and 43 percent plan to increase the use of FHLB advances in 1999. Similarly, the *American Bankers Association's 1999 Community Bank Competitiveness*

CHART 6



*Survey*<sup>7</sup> reported that FHLB advances are the preferred nontraditional funding product. In addition, legislative changes enacted in third-quarter 1998 have eased membership requirements for banks with assets less than \$500 million, significantly increasing access to FHLB advances for smaller banks in rural areas.

### Implications of Funding Trends for Community Banks

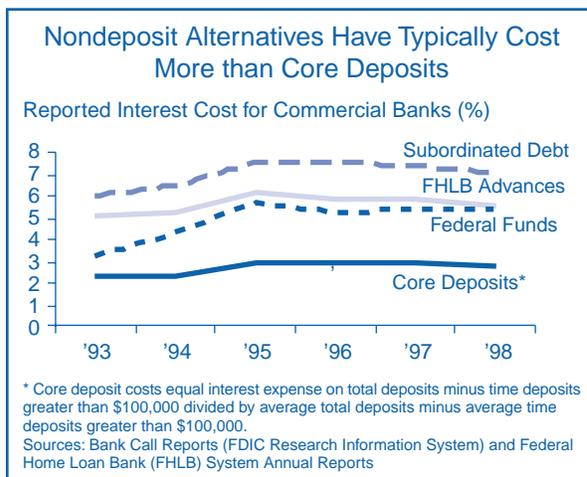
According to community banker opinion surveys, the trend toward greater reliance on noncore or alternative funding sources appears likely to continue. *Grant Thornton's 1999 Annual Survey of Community Bank Executives* found that 75 percent of community bankers expect funding with core deposits to be more difficult in three years than it is today. Moreover, more than 20 percent of community bankers responding to the *American Bankers Association's 1999 Community Bank Competitiveness Survey* do not expect to derive the bulk of their funding from deposits five years from now. Liability management is an important aspect of a bank's operations and a key driver of interest expense. Responses to funding challenges will likely influence strategic business decisions that shape the risk profiles of insured institutions, particularly community banks that historically have relied more heavily upon core deposits to fund asset growth and net interest income for profitability.

A fundamental challenge that confronts bank management is the strategic response to the increased costs associated with wholesale funding sources. As shown in Chart 7, the reported interest costs of nondeposit funding alternatives, such as federal funds purchased and repurchase agreements, subordinated notes, and FHLB advances, have traditionally exceeded the interest cost of core deposits for commercial banks. Therefore, as institutions that have typically relied upon core deposits increase the use of nondeposit sources, funding costs will likely rise relative to asset yields. As a result, net interest margins (NIMs) may be pressured.

To some extent bank managers may be able to offset the higher interest costs of wholesale funding strategy by improving efficiency through greater management of overhead expenses and increases in noninterest income. However, community banks face challenges to their ability to increase noninterest income (see "*Industry Consolidation Presents Unique Risks and Challenges*

<sup>7</sup> *ABA Banking Journal*, February 1999, p. 30.

CHART 7



*for Community Banks," Regional Outlook*, Fourth Quarter 1998), and there are limits to cost cutting. If banks are unable to fully offset higher funding costs with increases in noninterest income or reductions in noninterest expenses, overall profitability could suffer. Community bankers in the upper Midwest expressed this concern in a 1998 survey conducted by *The Federal Reserve Bank of Minneapolis*, which found that 57 percent of respondents expect the shift away from deposit funding to decrease bank profitability.<sup>8</sup> As bank managers search for additional ways to offset the relative rise in funding costs, they may be tempted to increase asset yields by pursuing additional portfolio risk, in the form of credit or market risk, to generate higher asset yields.

Funding challenges also could alter the liquidity and interest rate risk positions of community banks. The relative complexity and volatility of some nondeposit sources require greater expertise and attention to asset-liability policies and practices to avoid unexpected liquidity strains or exposures to changing interest rate environments. Strategies that result in the pledging of liquid assets, overreliance on purchased funds, or concentrations in price-sensitive long-term assets could adversely affect a bank's relative liquidity or interest rate risk position. Moreover, interest rate risk management can be further challenged by the complexity of nondeposit funding sources. For instance, some FHLB advances may contain embedded options that required greater expertise and attention to policies and practices that, if not managed properly, could lead to undesirable outcomes if interest rates change adversely.

<sup>8</sup> *Fedgazette*, July 1998, p. 2.

## In Focus This Quarter

### Differences between Community Banks with High and Low Levels of Core Deposit Funding

To evaluate how a shift from a core deposit funding strategy might change the profile of a community bank,

performance and condition measures for community banks that rely most heavily on core deposits were contrasted with those that are least reliant on core deposit funding. Table 1 compares 1998 funding, earnings, and asset performance measures for these community bank

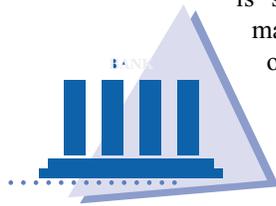
TABLE 1

COMPARISON OF BANKS WITH HIGH AND LOW LEVELS OF CORE DEPOSIT FUNDING						
	ALL COMMUNITY BANKS <sup>1</sup>		COMMUNITY BANK AGRICULTURAL LENDERS <sup>2</sup>		COMMUNITY BANK COMMERCIAL LENDERS <sup>3</sup>	
	HIGH CORE DEPOSIT FUNDING <sup>4</sup>	LOW CORE DEPOSIT FUNDING <sup>4</sup>	HIGH CORE DEPOSIT FUNDING	LOW CORE DEPOSIT FUNDING	HIGH CORE DEPOSIT FUNDING	LOW CORE DEPOSIT FUNDING
<b>SELECTED AGGREGATE MEASURES</b>						
NUMBER OF BANKS IN GROUP	405	405	106	51	126	185
MEDIAN TOTAL ASSETS (\$000s)	46,244	118,358	23,274	58,223	69,479	130,923
MEMBERS OF FHLB (%)	32.10	49.38	17.92	47.06	38.89	50.81
HAVE OUTSTANDING FHLB ADVANCES (%)	7.65	40.25	6.60	45.10	7.14	38.38
<b>SELECTED MEDIAN LIQUIDITY AND FUNDING MEASURES (%)</b>						
1998 GROWTH IN TOTAL ASSETS	9.02	11.16	5.96	6.42	12.75	18.50
1998 GROWTH IN TOTAL DEPOSITS	9.74	8.79	6.40	5.31	13.56	11.93
1998 GROWTH IN BORROWINGS	(50.00)	28.62	(64.49)	31.85	(51.87)	42.87
1998 GROWTH IN TOTAL EQUITY CAPITAL	5.93	7.53	3.46	5.39	9.94	8.85
TOTAL DEPOSITS-TO-TOTAL ASSETS RATIO	91.04	75.68	90.35	80.22	91.23	77.94
CORE DEPOSITS-TO-TOTAL ASSETS RATIO	87.29	53.87	87.10	55.81	87.21	54.03
BORROWINGS TO TOTAL ASSETS RATIO	0	9.58	0	4.15	0	8.55
TOTAL EQUITY CAPITAL TO TOTAL ASSETS RATIO	8.25	10.24	9.00	10.09	7.74	10.16
<b>SELECTED MEDIAN PERFORMANCE RATIOS (%)</b>						
RETURN ON EQUITY	12.65	10.19	11.10	10.93	14.49	9.52
RETURN ON ASSETS	1.07	1.04	1.01	1.19	1.10	0.92
NET INTEREST MARGIN	4.76	4.03	4.51	3.98	5.25	4.22
GROSS EARNING ASSET YIELD <sup>5</sup>	8.17	8.02	8.24	7.89	8.45	8.26
COST OF FUNDING EARNING ASSETS <sup>6</sup>	3.33	4.07	3.74	4.05	3.21	4.05
NONINTEREST INCOME TO AVERAGE ASSETS	0.76	0.61	0.59	0.44	1.01	0.64
NONINTEREST EXPENSE TO AVERAGE ASSETS	3.49	2.90	3.23	2.40	3.99	3.12
EFFICIENCY RATIO <sup>7</sup>	69.01	63.68	68.59	57.48	68.99	67.00
<b>SELECTED MEDIAN CREDIT QUALITY MEASURES (%)</b>						
NONPERFORMING ASSETS TO TOTAL ASSETS RATIO	0.39	0.44	0.40	0.51	0.46	0.61
NONCURRENT LOANS TO TOTAL LOANS RATIO	0.53	0.72	0.53	1.02	0.52	0.77
NET LOAN CHARGE-OFF RATIO	0.11	0.12	0.04	0.15	0.14	0.11
1998 GROWTH IN NONPERFORMING ASSETS	(9.10)	7.50	10.57	11.79	(17.32)	23.97
1998 GROWTH IN NET LOAN LOSSES	6.09	10.24	(3.90)	23.73	9.59	30.64

<sup>1</sup> COMMUNITY BANKS ARE BANKS WITH \$1 BILLION OR LESS IN TOTAL ASSETS.  
<sup>2</sup> AGRICULTURAL LENDERS ARE BANKS WITH 25 PERCENT OR MORE OF ASSETS IN AGRICULTURAL REAL ESTATE LOANS OR AGRICULTURAL PRODUCTION LOANS.  
<sup>3</sup> COMMERCIAL LENDERS ARE BANKS WITH 25 PERCENT OR MORE OF ASSETS IN COMMERCIAL AND COMMERCIAL REAL ESTATE LOANS.  
<sup>4</sup> HIGH CORE DEPOSIT FUNDING GROUP IS COMPOSED OF COMMUNITY BANKS WITH CORE DEPOSITS-TO-ASSETS RATIOS IN THE TOP 5 PERCENT OF ALL COMMUNITY BANKS, EXCLUDING THOSE WITH EQUITY-TO-ASSETS RATIOS IN EXCESS OF 25 PERCENT. THE LOW CORE DEPOSIT FUNDING GROUP IS COMPOSED OF COMMUNITY BANKS WITH CORE DEPOSITS-TO-ASSETS RATIOS IN THE BOTTOM 5 PERCENT OF ALL COMMUNITY BANKS.  
<sup>5</sup> GROSS EARNING ASSET YIELD EQUALS INTEREST INCOME DIVIDED BY AVERAGE EARNING ASSETS.  
<sup>6</sup> COST OF FUNDING EARNING ASSETS EQUALS INTEREST EXPENSE DIVIDED BY AVERAGE EARNING ASSETS.  
<sup>7</sup> EFFICIENCY RATIO EQUALS NONINTEREST EXPENSE DIVIDED BY THE SUM OF NET INTEREST AND NONINTEREST INCOME.  
 FHLB = FEDERAL HOME LOAN BANK  
 SOURCES: BANK CALL REPORTS (RESEARCH INFORMATION SYSTEM); FEDERAL HOUSING FINANCE BOARD

groups. High core deposit funders are defined as those community banks with core deposit-to-asset ratios in the top 5 percent of all community banks at year-end 1998. Low core deposit funders are those community banks with a core deposit-to-asset ratio in the bottom 5 percent.<sup>9</sup> A similar comparison is included for agricultural banks and commercial lending specialists, which combined make up roughly 60 percent of each of the total community bank funding groups.

This comparison reveals several differences. First, a tradeoff between heavy reliance on core funding and asset growth is evident. Median measures for the groups indicate that the typical bank that relies less on core deposit funding is larger and growing faster than the typical bank in the high core funding group. Second, less core deposit funding appears to be associated with a lower NIM, primarily the result of higher funding



costs. However, overall profitability is similar between the groups mainly because of a lower ratio of overhead expenses to average assets for the low core funders. These characteristics are also evident across the agricultural and commercial specialists groups.

Asset quality indicators suggest that the low core funding groups may exhibit greater credit risk. Although higher asset yields resulting from increased portfolio risk are not evident, median measures for each low core funding group reflect higher levels of noncurrent loans and higher growth in nonperforming assets and net loan losses relative to its high core funding group counter-

part. For example, the median growth in nonperforming assets for commercial lending specialists with less reliance upon core deposits was nearly 24 percent in 1998 versus a 17 percent decline for the high core funding group.

### ***Summary and Conclusions***

Commercial banks have been experiencing a long-term trend toward lower deposit funding of loans and assets. Increasing competition among banks and from thrifts, nonbanks, and higher-yielding investment alternatives has made it more difficult and expensive for some banks to attract deposits in step with asset growth. While some nondeposit funding alternatives may provide a stable source of funds for insured institutions (especially those located in areas characterized by aggressive competition and slow deposit growth), better matching of asset cash flows, and greater flexibility in asset-liability management, they also may pose certain risks. To some extent community banks may be able to manage noninterest expense and noninterest income to offset the relative increase in interest expense incurred to acquire nondeposit funding sources. However, if overall profitability suffers, banks may be tempted to pursue additional portfolio risk to generate higher offsetting asset yields. As a result, liability management may become more challenging for community banks that have historically relied upon deposits for funding and net interest revenues for profitability. In addition, the complexity of some nondeposit funding sources requires greater expertise and attention to policies and practices to avoid unexpected liquidity strains or exposures to changing interest rate environments.

*Allen Puwalski, Senior Financial Analyst  
Brian Kenner, Financial Analyst*

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<sup>9</sup> These groups exclude community banks with equity-to-asset ratios greater than 25 percent.

## *Regional Perspectives*

- Signs emerge of a moderating Regional economy.
- Despite a recent firming in oil prices, exploration and development firms, refiners, and suppliers are unlikely to increase capital spending or hiring in the near future.
- A prolonged period of depressed prices or another round of drought conditions will place further stress on agricultural producers, adversely affecting farm banks' loan quality and earnings.
- Funding trends at the Region's commercial banks and savings institutions<sup>1</sup> differ significantly.
- The Region's commercial banks hold twice the national average of non-interest-bearing deposits as a percentage of total assets, which provides an important source of low-cost funds.
- Use of borrowings has increased, facilitating loan growth at savings institutions.

### *Signs Emerge of a Moderating Regional Economy*

#### *Payroll Employment Is an Indicator of Slowing Dallas Regional Economy*

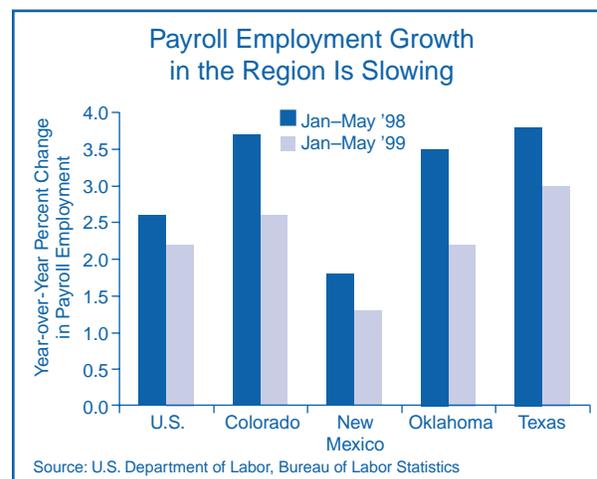
The second-quarter issue of the *Dallas Regional Outlook* noted some developments indicating that the Region's economy may be slowing after two years of rapid job growth. Recently issued economic statistics, including the payroll employment numbers, provide further evidence of this trend. Chart 1 compares the Region's and the nation's seasonally adjusted payroll employment growth rates on a year-to-date basis for the first five months of 1998 and 1999. In every case, payroll employment growth rates are lower in 1999. Except for **New Mexico**, where job growth stands at 1.3 percent, other states in the Region—**Oklahoma** (2.3 percent), **Colorado** (2.5 percent), and **Texas** (2.9 percent)—continue to grow at or above the U.S. average growth rate (2.3 percent). Economic growth and employment growth are expected to slow somewhat further during the second half of this year. The latest consensus of economists surveyed by *Blue Chip Indicators* forecasts a slowing in U.S. real output growth from 4.3 percent in first-quarter 1999 to 3.0 percent in second-half 1999.

#### *Construction, Transportation, and Financial Services Sectors Lead the Economy*

Nonagricultural employment payroll growth remains strong in the Region largely because of expanding eco-

nomics activity in construction, transportation and communications, and financial and business services. Residential housing demand remains robust, led by gains in employment and income and, until recently, relatively low mortgage rates. Commercial construction appears to be rebounding slightly as well. Advanced technology industries such as communications and Internet-related products are responsible for much of the employment growth in many of the Region's high-technology metropolitan areas. A strong U.S. stock market—stimulated by domestic investment in telecommunications and information technology and by foreign investors seeking to form business relationships with U.S. technology firms—continues to create jobs in financial and business services.

**CHART 1**



<sup>1</sup> Savings institutions include savings and loans, savings banks, and stock and mutual savings banks.

## Regional Perspectives

### *Mining and Manufacturing Account for the Slower Job Growth*

Significant job losses in the mining (primarily oil and gas extraction) and manufacturing sectors have contributed to slower job growth in 1999. Economic weakness among the Region's major trading partners, such as Mexico and other Latin American nations, and a strong U.S. dollar have curtailed demand for goods manufactured locally. Approximately 12,600 jobs were lost in the Region's manufacturing industries for the year ending May 1999.<sup>2</sup> According to statistics provided by the *International Monetary Fund*, global economic growth remains at almost 2 percent, with recessions occurring in certain Asian and Latin American economies and slower economic growth in Europe. Weak U.S. export growth is associated with slower global economic growth. In fact, first-quarter 1999 foreign trade data revealed a 7.4 percent decline in exports from Texas, the Region's largest exporter.

During the 12-month period ending May 1999, the Region's mining sector eliminated about 20,100 jobs, or 8.7 percent of total mining jobs. Low oil prices caused by overproduction and weak demand have contributed strongly to this industry contraction. Despite a recent firming in oil prices, exploration and development firms, refiners, and suppliers appear unlikely to increase capital spending or hiring in the near term. Only a sustained period of oil prices \$18/barrel or higher (West Texas Intermediate) would result in oil firms' increasing production and employment.

The Dallas Region's economy has become more diversified since the oil price shocks of the early and mid-1980s. As a result, employment sensitivity to a change in oil prices is much less today than a decade ago. In fact, while oil prices were falling in 1998, the Region's employment continued to grow at a moderate to strong rate. However, counties that depend heavily on oil production have been adversely affected by depressed oil prices, resulting in rising unemployment. This can be seen in the **Odessa-Midland**, Texas, metropolitan area, which, during the year ending April 1999, led the nation's metropolitan areas in three categories: the greatest year-over-year employment decline (-2,900);

<sup>2</sup> Manufacturing industries are food products, apparel, instruments and related equipment, paper products, primary metals, industrial machinery (particularly oil and gas field machinery), electronics, transportation equipment (primarily aircraft and parts), and motor vehicles and equipment.

the largest year-over-year percentage decline in employment (-2.7 percent); and the largest year-over-year increase in the jobless rate, from 4.3 percent in April 1998 to 8.7 percent in April 1999.

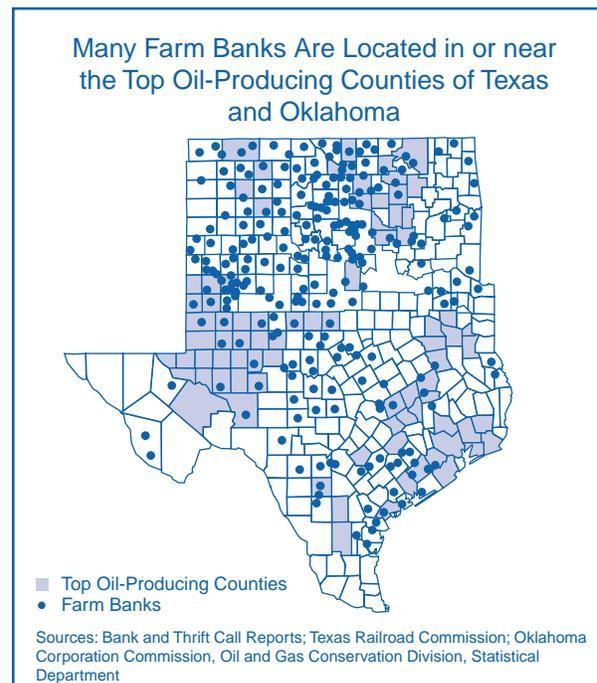
Overall, among the top 50 oil-producing counties in Texas and Oklahoma, which account for 75 percent of those states' total production, nearly 75 percent experienced an increase in unemployment between first-quarter 1998 and first-quarter 1999. In comparison, only 43 percent of the remaining 281 counties experienced a rise in the unemployment rate.

Although counties in the "oil patch" have experienced difficulties in the past year and a half, community banks headquartered in these counties have not reported signs of deteriorating performance.

Many of these oil-producing counties also depend on agricultural production—another industry that has fallen on hard times. Map 1 shows that many of the farm banks<sup>3</sup> in Texas and Oklahoma are located in or near the states' top oil-producing counties.

<sup>3</sup> A farm bank is defined as a bank with 25 percent or more of total loans concentrated in agriculture.

MAP 1



## Regional Perspectives

### *Agriculture Industry Faces Continued Stress*

Agricultural producers in the Region face continuing stress. Prices of the Region's primary agricultural commodities have been depressed, and many agricultural production centers have experienced weather-related problems. According to data on rural real estate value from the first-quarter 1999 *Quarterly Survey of Agricultural Credit Conditions in the Eleventh Federal Reserve District*, isolated areas have seen a slight decline in land prices, but overall, land prices have risen over the past six months. Nevertheless, anecdotes about increases in land and machinery auctions and large farming operations declaring bankruptcy continue to surface. While the *Federal Reserve Board's* survey data do not confirm these conditions as systemic, some survey participants project a fall in machinery and real estate prices caused by a growing number of farm sales.

Although the number of past-due loans increased slightly during the first quarter, farm banks in the Dallas Region have continued to report healthy profits and strong credit quality. Increased equity, relatively low charge-off rates, crop insurance payments to farmers, and early disbursements of production flexibility contract payments contribute to the health of the Region's 332 farm banks. See Table 1.

Despite this reported healthy performance, the *FDIC's Report on Underwriting Practices* and agricultural credit condition surveys from the Dallas and Kansas City *Federal Reserve Banks* report significant increases in carryover debt from agricultural lending. The Federal Reserve Bank of Dallas also reported a decline in loan repayment and reduced loan demand. As previously mentioned, agricultural past-due ratios were slightly higher in the first quarter of 1999. These indicators suggest that increased financial pressure on agricultural producers is affecting their borrowing and repayment capabilities.

Moreover, the near-term outlook for agriculture is uncertain. The *U.S. Department of Agriculture (USDA)* expects net farm income to remain depressed by low commodity prices. The continued pressure on prices is largely attributable to high global production and large inventories. These global economic conditions have hit the Region's agricultural producers particularly hard. For example, the *Texas Department of Economic Development* reports that agricultural crop exports declined more than 40 percent during the first quarter of 1999 compared with a year earlier, and livestock exports declined by more than 50 percent. Many industry participants believe that another year of low prices or another round of drought conditions could place enough stress on weaker agricultural producers to begin affecting farm banks' loan quality and earnings.

TABLE 1

THE REGION'S FARM BANKS REPORT HEALTHY PERFORMANCE						
	DALLAS REGION FARM BANKS			ALL OTHER BANKS IN THE DALLAS REGION		
	31-MAR-99	31-MAR-98	31-MAR-97	31-MAR-99	31-MAR-98	31-MAR-97
NUMBER OF BANKS	332	373	378	1,084	1,118	1,191
RETURN ON ASSETS (%)	1.25	1.38	1.32	1.11	1.24	1.21
NET INTEREST MARGIN (%)	4.29	4.42	4.44	4.14	4.02	4.32
LEVERAGE RATIO (%)	10.37	10.56	10.78	7.70	7.57	7.84
NET CHARGE-OFFS (%)	0.22	0.07	0.23	0.43	0.36	0.36
TOTAL PAST-DUE LOANS (%)	3.79	3.51	4.00	2.47	2.36	2.40

SOURCE: BANK AND THRIFT CALL REPORTS, MARCH 31, 1999

*Banks and Thrifts Report Strong, but Somewhat Weaker,  
Performance in First Quarter*

Dallas Region banks and thrifts reported good, but somewhat weaker, operating results for the first quarter of 1999 (see Table 2). The average return on assets (ROA) was 1.11 percent for the three months ending March 31, 1999, which is 16 basis points below the ROA reported for the nation and 14 basis points less than the same period one year ago. Typically, the Region's ROA tracks the nation's; however, this quarter's difference is the largest in more than three years. Eighty-nine institutions reported losses for the first quarter. This number has more than doubled over the past four years. Moreover, the percentage of insured institutions reporting a decline in ROA compared with the prior year has increased over the past seven years from 25 percent to 50 percent for the quarter ending March 31. At the beginning of this trend (1992), a strong majority of insured institutions reported earnings growth, as they, and the Region's economy, were emerging from troubles associated with the late 1980s and early 1990s. In contrast, given the economy's strong performance more recently, profitability has been difficult to sustain.

In addition, credit quality appears to show initial signs of weakening. Past-due loans as a percentage of total loans increased during each of the past four quarters to 2.53 percent as of March 31, 1999. The national average for the same period was 2.11 percent. The sharpest increases in past-due loans were found in commercial and industrial loans, followed by loans secured by farmland. Signs of a slowing economy in the Region, a growing number of institutions reporting losses, and

initial signs of weakening credit quality may be a forewarning of poorer performance ahead.

In a comparison of Dallas Region financial institutions with banks and thrifts nationwide, all asset groups<sup>4</sup> underperformed the national averages with the exception of small institutions (those under \$100 million). Of particular note are commercial banks in the Region with assets between \$1 billion and \$10 billion, which posted an average ROA of 1.23 percent, 50 basis points less than similar-sized banks nationwide. The key difference is related to noninterest income. Dallas Region banks collected 150 basis points less in noninterest income than did banks of similar size nationwide.

Differences in performance persist even within institutions under \$100 million in assets. The 356 small institutions located in metropolitan areas reported an average ROA of 1.03 percent. In sharp contrast, 609 institutions located in rural areas reported an average ROA of 1.22 percent (see Chart 2, next page). Small institutions in urban areas enjoy a large advantage in noninterest income, and to a lesser extent net interest income, compared with small banks and thrifts headquartered in rural areas. However, overhead (noninterest expense) for small urban institutions, at 4.34 percent of average assets, is much higher than for small rural

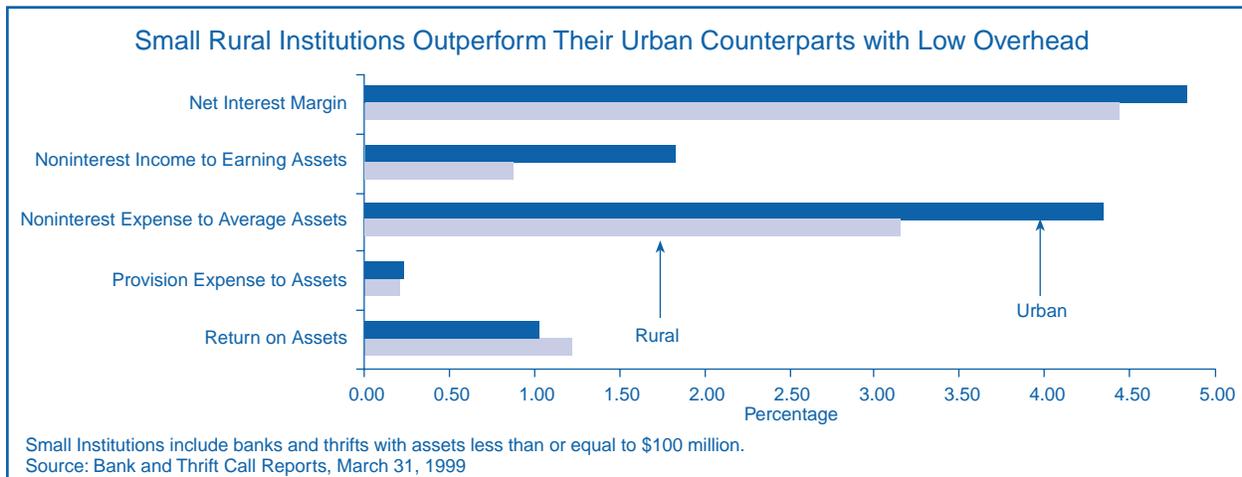
<sup>4</sup> Banks are grouped as follows: over \$10 billion, \$1 billion to \$10 billion, \$100 million to under \$1 billion, and under \$100 million.

**TABLE 2**

DALLAS REGION PROFITABILITY UNDERPERFORMS THE UNITED STATES DURING THE FIRST QUARTER OF 1999						
PERCENTAGE	U.S.	REGION	COLORADO	NEW MEXICO	OKLAHOMA	TEXAS
RETURN ON ASSETS	1.27	1.11	1.42	1.15	1.20	1.04
RETURN ON EQUITY	14.72	13.16	18.34	13.20	13.00	12.41
NET INTEREST MARGIN	3.88	4.15	5.03	4.45	4.08	3.99
PAST-DUE LOANS	2.11	2.53	2.42	3.03	2.60	2.50
UNPROFITABLE	5.98	6.25	6.37	10.77	5.68	6.09
CHARGE-OFF RATE	0.53	0.42	0.60	0.37	0.17	0.44
LEVERAGE RATIO	7.71	7.86	7.48	8.11	8.19	7.84
LOAN-TO-ASSET RATIO	61.00	56.70	52.36	51.90	60.10	57.15

SOURCE: BANK AND THRIFT CALL REPORTS, MARCH 31, 1999

CHART 2



institutions (3.15 percent). The lower operating costs more than outweigh the higher revenues of small urban banks and account for the difference in performance.

### Commercial Banks' Funding Trends in the Dallas Region Differ from Nationwide Trends

An analysis of funding trends at insured institutions across the country shows that core deposits<sup>5</sup> play a less significant role in funding asset growth than in previous years. (See *Shifting Funding Trends Pose Challenges for Community Banks.*) However, this trend is not as evident in the Dallas Region. While savings institutions follow the nationwide trend,<sup>6</sup> the Region's commercial banks show a very different tendency. As depicted in Chart 3, savings institutions have seen core deposits, as a share of total assets, decline by 20 percentage points to 45 percent. However, the mix of core deposits to assets for commercial banks has changed little over the same period.

As of March 31, 1999, 84 savings institutions were operating in the Dallas Region, representing \$65 billion in assets. Savings institutions in the Region currently have a loan-to-deposit ratio of 117 percent compared with 64 percent for commercial banks; the national

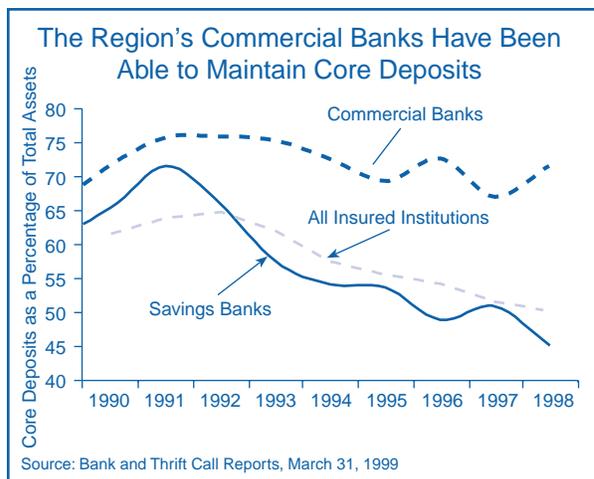
<sup>5</sup> Core deposits are defined as total domestic deposits less time deposits over \$100,000 held in domestic offices. All other funding, including foreign office deposits, domestic time deposits over \$100,000, other borrowings, and repos, are considered noncore deposits for purposes of this analysis.

<sup>6</sup> Savings institutions in the Dallas Region have the lowest core-deposit-to-asset ratio, compared with the national average (50 percent), all institutions in the Region (67 percent), and all savings institutions in the nation (54 percent).

average is 90 percent. Increased loan growth and reduced reliance on deposits has led to this divergence over the past six years (see Chart 4). Loans at savings institutions in the Region, as a percentage of total assets, more than doubled from 31 percent in 1990 to 69 percent in 1998. Real estate loans and consumer loans have seen the greatest increases. Real estate loans represented 52 percent of total assets at year-end 1998, up from 28 percent at year-end 1990. Similarly, consumer loans as a percentage of total assets have increased from 5 percent in 1990 to 13 percent in 1998. Asset growth has far outstripped deposit growth even though savings institutions pay higher interest rates on deposits than their commercial bank competitors.

The Region's savings institutions have used noncore funding, especially other borrowed funds, to facilitate this loan expansion. Over the past eight years noncore

CHART 3



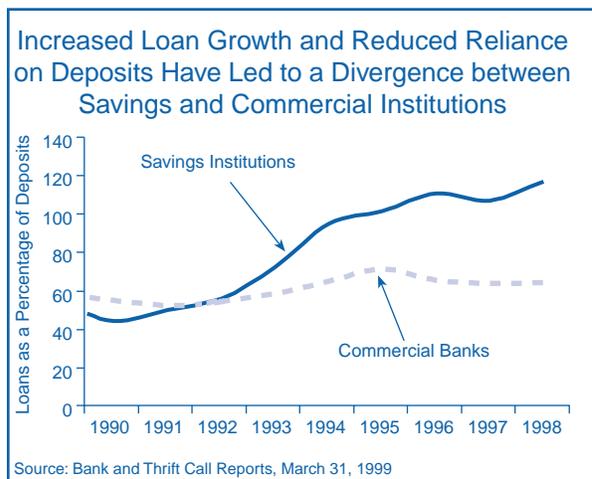
## Regional Perspectives

funding has increased 13 percentage points to 46 percent of total assets. This noncore position is higher than the average for all institutions in the nation (36 percent) or the Region (23 percent). Moreover, it is also higher than the average of all savings institutions in the nation (36 percent). The most significant component of non-core funding is other borrowings, primarily composed of Federal Home Loan Bank (FHLB) advances. As of December 31, 1998, other borrowings at the Region's savings institutions represented 31 percent of total assets, up from 23 percent in 1990. Ninety percent of the Region's savings institutions are FHLB members, and 74 percent had advances outstanding at year-end 1998. Comparatively, only 42 percent of the Region's commercial banks are FHLB members and only 22 percent held FHLB advances at year-end 1998.

Commercial banks in the Dallas Region have not followed the national trend of funding loan growth with noncore funding, mainly because they have not experienced the rapid loan growth encountered by institutions across the nation and because they have been able to maintain their level of core deposit funding. Loan growth relative to assets has been modest, increasing from 46 percent in 1990 to 52 percent in 1998. Meanwhile, core deposits have remained relatively stable, averaging between 67 percent and 72 percent of total assets over the past eight years.

One consequence of the differences in funding is that commercial banks have much lower funding costs than savings institutions. Commercial banks in the Dallas Region as of March 31, 1999, reported an average cost of funding, as a percentage of earning assets, of 3.3 percent versus 4.7 percent for savings institutions. The

CHART 4



major reason for the cost-of-funding advantage is that commercial banks have a much greater share of deposits in non-interest-bearing deposits—19.7 percent of total assets compared with 4.1 percent for savings institutions. The average for all institutions nationwide is 10.8 percent (see Chart 5). These deposits provide a low-cost source of funding and are a key reason why commercial banks in the Region maintain profitability that is competitive, even with a relatively low percentage of assets in loans (see Chart 6).

Dallas Region commercial banks and savings institutions ended the first quarter of 1999 with almost identical ROAs. Commercial banks earned a higher net interest margin because of their much lower cost of funds, even though they have higher overhead expenses associated with maintaining a high volume of depositors. Savings institutions, on the other hand, report

CHART 5

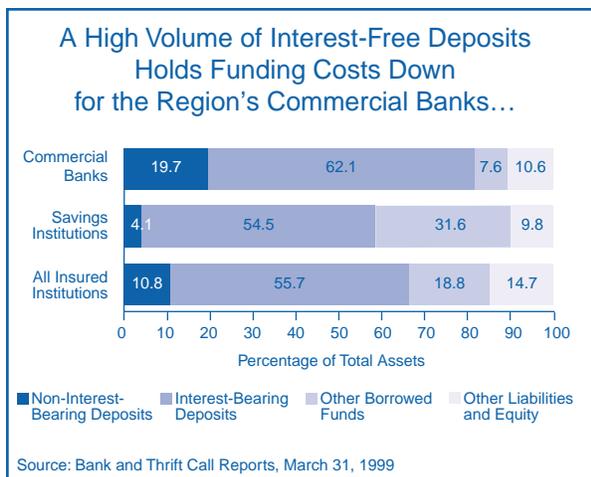
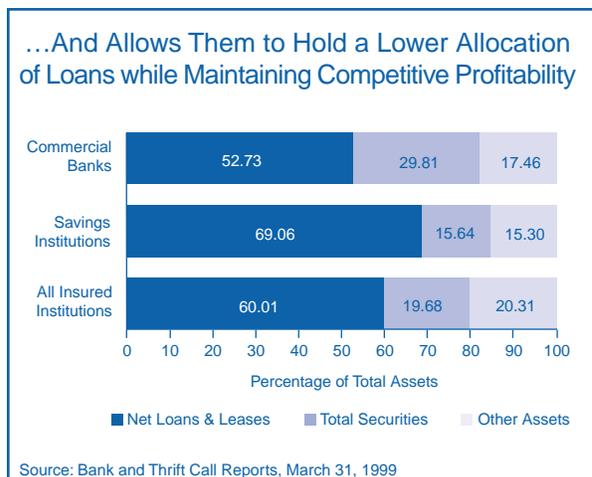


CHART 6



lower salaries, benefits, and other noninterest expenses, but have a higher interest expense associated with more expensive noncore funding. While the business and funding strategies are very different, the end result is essentially the same. However, the differing emphasis on the use of core deposits highlights the questions raised by recent studies that challenge common perceptions on the value of core deposits.

Traditionally, core deposits have been considered a desirable source of funding earning assets, but studies suggest that the true cost of core deposits is actually much higher than many believe. According to *US Banker*, "As banks have acquired robust information systems, they've come to appreciate the fully-loaded costs of acquiring certain deposits and have become less enamored of them, because it may actually be expensive money."<sup>7</sup>



Commercial banks in the Region may face difficulty in maintaining their reliance on core deposits. According to a survey conducted by *Grant Thornton*,<sup>8</sup> three out of four community banks report that funding with core deposits will be more difficult in three years than it is today. Forty-four percent of all community banks predict that FHLB system borrowings will be

an important funding source over the next three years, compared with 27 percent that describe these borrowings as very important today. In addition, 43 percent of all community banks, including 52 percent of FHLB system members, anticipate increasing their use of FHLB borrowings in 1999. If these survey responses prove accurate, then commercial banks in the Region may be forced to consider adopting alternative funding strategies.

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<sup>7</sup> "Those Dwindling Deposits." *US Banker*, January 1996. Statement is credited to Chris Formant, a Boston-based national partner in the financial services group of Coopers & Lybrand Consulting.

<sup>8</sup> *Grant Thornton* conducts an annual survey of community bank executives entitled "Community Banks: A Competitive Force."

*Shifting Funding Trends Pose Challenges for Community Banks* discusses two potential risks associated with a change in funding sources. (See *In Focus* article, page 11.) First, the new products could complicate asset-liability management in a rapidly changing interest-rate or liquidity environment. Second, higher funding costs associated with new sources may put further pressure on net interest margins, causing some managers to take on either riskier loans or longer term securities in an effort to increase interest income and thereby maintain current ROA and return-on-equity measures. Both issues depend on management's understanding and skill in addressing these risk elements to maximize shareholder wealth while providing reasonable safety and soundness.

### Implications

In summary, while savings institutions in the Dallas Region follow the nationwide trend of increasing reliance on noncore sources to fund loan growth, commercial banks in the Region will differ materially in that they continue to rely heavily on deposit funding and enjoy an extraordinarily low cost of funds because they have a high percentage of non-interest-bearing deposits. However, the Region's commercial banks have not experienced the growth in loans seen at the Region's savings institutions over the past several years. Whether the commercial banks in the Dallas Region will eventually follow the national trend remains to be seen. If the Dallas banks begin to lose core deposits or experience strong loan growth, they may be compelled to increase the use of noncore funding. Pressures to maintain interest margins even with higher funding costs associated with greater noncore funding, as well as heightened competition, may tempt institutions to seek higher yields and could result in higher credit risk. This potential shift in funding structure may also contribute to greater volatility in funding and increase sensitivity to changing market conditions. As a result, the overall asset-liability management of smaller institutions may become more complex.

*Dallas Region Staff*

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