
◆ Regional Outlook ◆

FEDERAL DEPOSIT INSURANCE CORPORATION

THIRD QUARTER 1999

FDIC ATLANTA REGION



DIVISION OF
INSURANCE

JACK M.W. PHELPS,
REGIONAL MANAGER

SCOTT C. HUGHES,
REGIONAL ECONOMIST

PAMELA R. STALLINGS,
SENIOR FINANCIAL
ANALYST

W. BRIAN BOWLING,
SENIOR FINANCIAL
ANALYST

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

◆ *Agricultural and industrial commodity price declines are adversely affecting some Atlanta Region producers*—Hog, soybean, and cotton prices have fallen sharply in recent years as a result of low inflationary expectations, excess productive capacity, and weakened global demand. Lower prices have led to reduced farm income and employment in some parts of the Region. Industrial commodities such as steel, textiles and apparels, and pulp and paper also have been hurt by a strong U.S. dollar and financial turmoil overseas. While the Region's overall economy remains strong, the troubled agricultural and manufacturing sectors are largely concentrated in less diverse rural areas where economic growth has been much slower. Persistent price stagnation could lead to further financial stress in these areas, which could negatively affect credit quality at some insured institutions. *See page 18.*

◆ *Bank funding has changed considerably during this economic expansion and differs from previous cycles*—Loan demand has outpaced deposit growth at Atlanta Region commercial banks since the current economic expansion began in 1992. This situation has led to an increase in noncore funding, particularly borrowings, at both large and small banks. A more diverse funding mix may offer advantages with regard to asset and liability management, but it also raises some new potential risks. Many industry observers believe funding issues represent a major long-term challenge to the industry and one that is likely to affect community banks more than large banks. *See page 22.*

By Atlanta Region Staff

The **Regional Outlook** is published quarterly by the Division of Insurance of the Federal Deposit Insurance Corporation for the following eight geographic regions:

Atlanta Region (AL, FL, GA, NC, SC, VA, WV)

Boston Region (CT, MA, ME, NH, RI, VT)

Chicago Region (IL, IN, MI, OH, WI)

Dallas Region (CO, NM, OK, TX)

Kansas City Region (IA, KS, MN, MO, ND, NE, SD)

Memphis Region (AR, KY, LA, MS, TN)

New York Region (DC, DE, MD, NJ, NY, PA, PR, VI)

San Francisco Region (AK, AZ, CA, FI, FM, GU, HI, ID, MT, NV, OR, UT, WA, WY)

Single copy subscriptions of the **Regional Outlook** can be obtained by sending the subscription form found on the back cover to the FDIC Public Information Center. Contact the Public Information Center for current pricing on bulk orders.

The **Regional Outlook** is available on-line by visiting the FDIC's website at www.fdic.gov/publish/regout. For more information or to provide comments or suggestions about the Atlanta Region's **Regional Outlook**, please call Jack Phelps at (404) 817-2590 or send an e-mail to jphelps@fdic.gov.

The views expressed in the **Regional Outlook** are those of the authors and do not necessarily reflect official positions of the Federal Deposit Insurance Corporation. Some of the information used in the preparation of this publication was obtained from publicly available sources that are considered reliable. However, the use of this information does not constitute an endorsement of its accuracy by the Federal Deposit Insurance Corporation.

Chairman

Donna Tanoue

Director, Division of Insurance

Arthur J. Murton

Executive Editor

George E. French

Editors

Lynn A. Nejezchleb
Maureen E. Sweeney

Publications Manager

Teresa J. Franks

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.

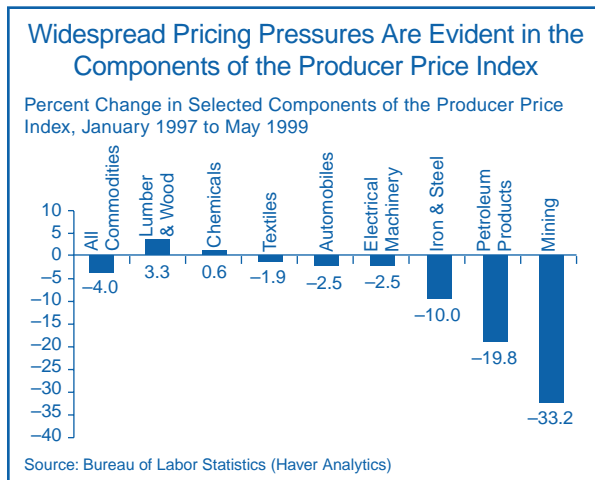
Prices Have Been Declining across a Range of Commodities and Manufactured Goods

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.

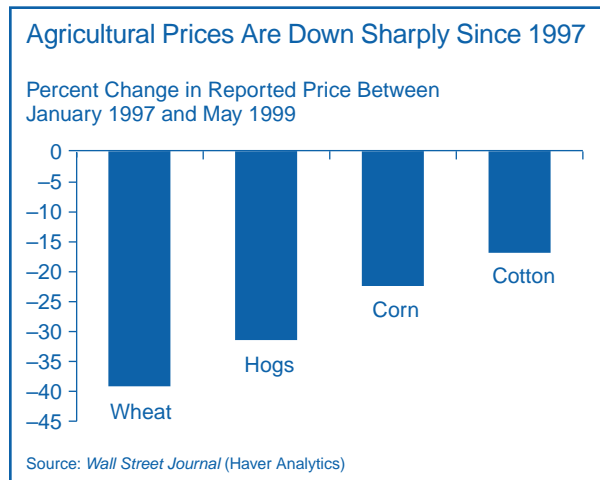
Reasons for Broad-Based Commodity Price Weakness

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.¹

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

¹ 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.² Because these additions to capacity largely have not been offset by the closure of existing plants, analysts say that global productive capacity in autos

² 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 2000.³ 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.⁴

- 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 1998.⁵ 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.

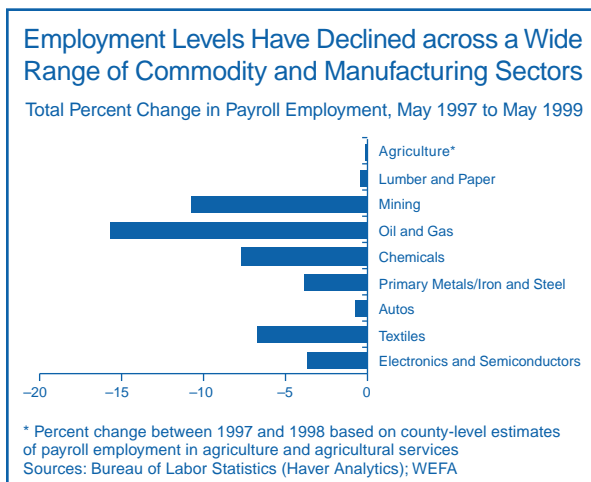
Recently, there have been signs that some hard-hit Asian economies may soon begin to recover. However, the other factors cited above—low inflationary expectations and rapid investment in productive capacity—may well be longer-term trends. In any event, U.S. farmers and businesses that participate in 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

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

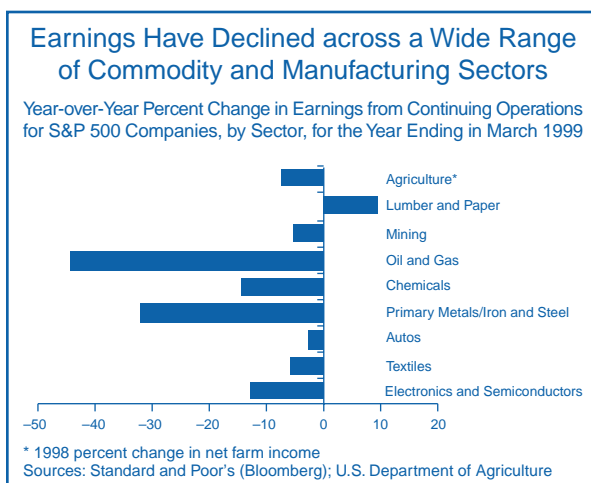
CHART 3



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



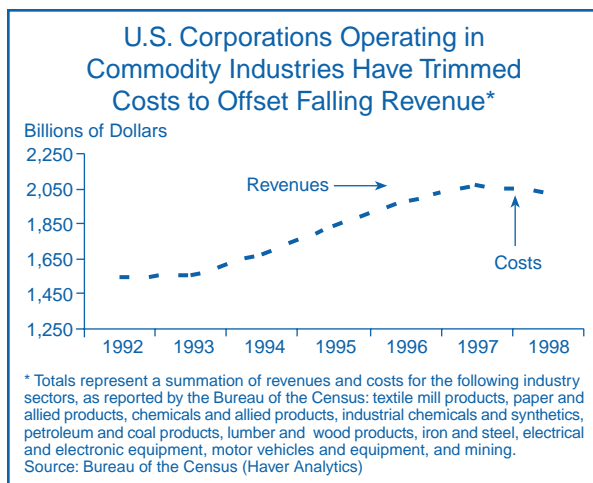
incomes fell by more than 7 percent in 1998, according to the *U.S. Department of Agriculture*.

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

CHART 5



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.⁶ Recent consolidation in commodity industries could be depicted as an

⁶ 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.⁷ 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.⁸ 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.

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

⁸ 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

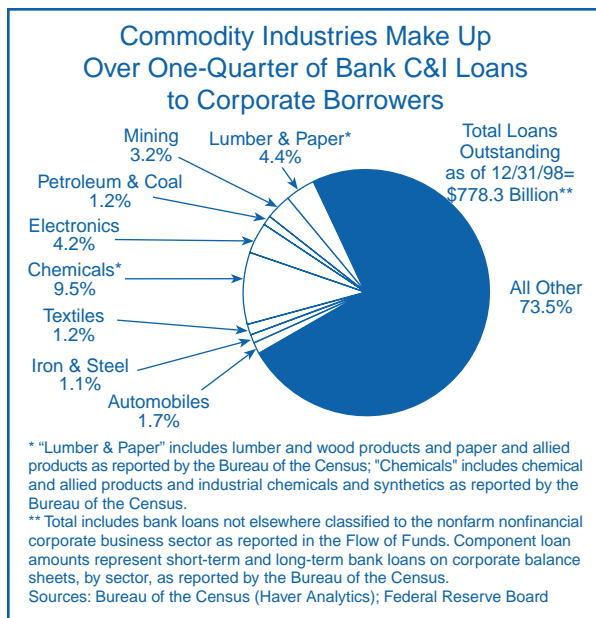
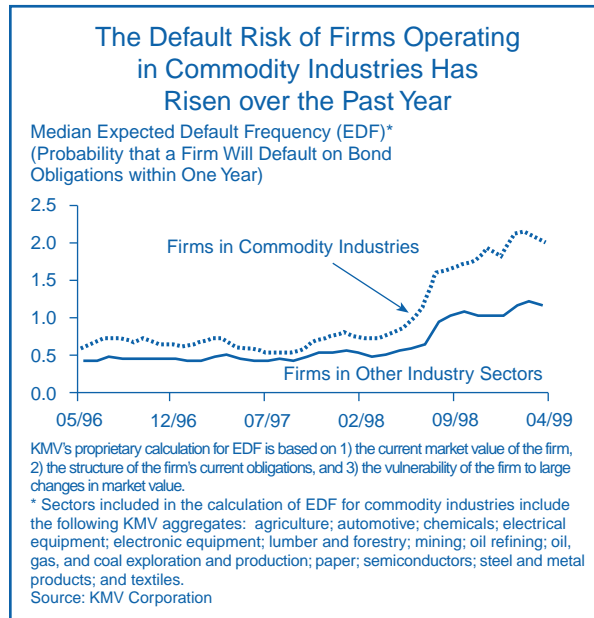


CHART 7



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 1990.⁹ 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.¹⁰ Moreover, the study shows that there can be a significant lag between the onset of industry-sector problems and the emergence of performance problems

⁹Federal 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>.

¹⁰Federal 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).¹¹ 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

¹¹ 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 1998.¹² 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.¹³ 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.¹⁴ These considerations suggest that bankers in commodity-dependent counties should continually

¹² 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.

¹³ 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.

¹⁴ 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,¹ 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.

¹ 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 assets² 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

² 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

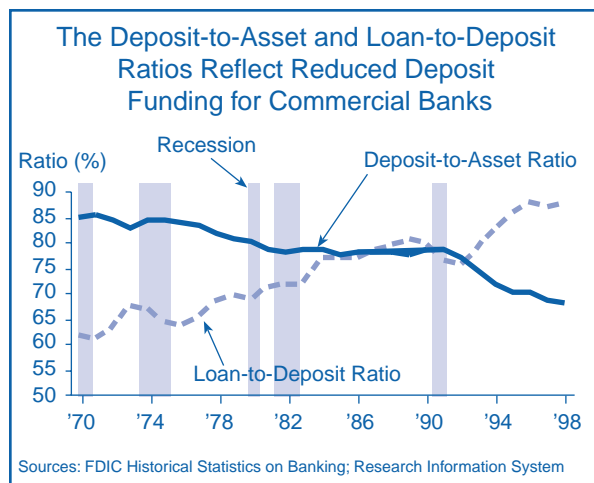
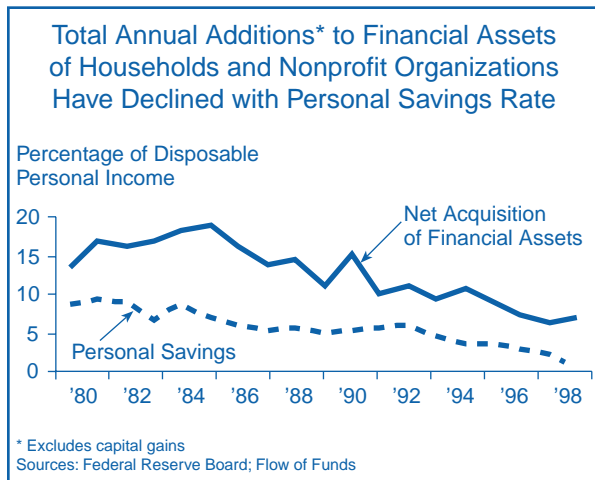


CHART 2



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*,³ but they also

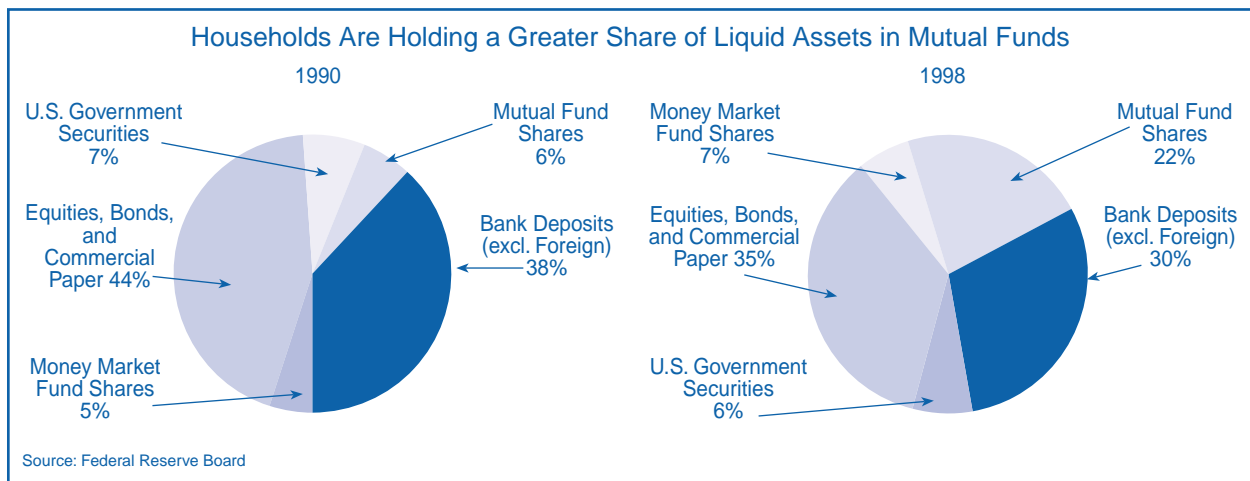
³ Grant Thornton's 1999 Sixth Annual Survey of Community Bank Executives, "Community Banks: A Competitive Force," <http://www.grantthornton.com/resources/finance/banksurvey99/survey99w.html>.

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.⁴ 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.⁵ 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.

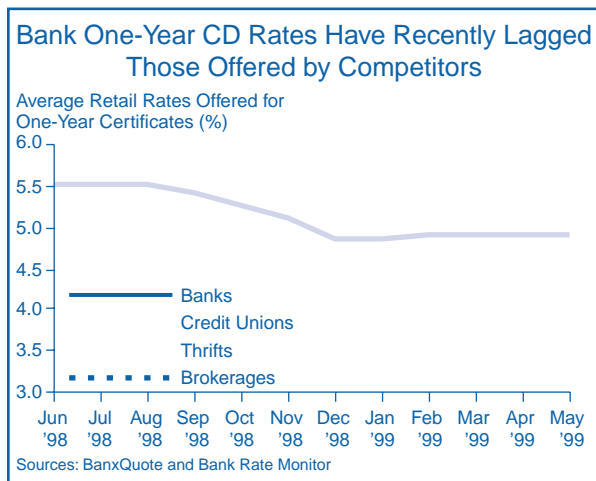
While large banks have responded to factors influencing deposit growth by making greater use of alternative funding sources, funding options for community banks tend to be more limited.



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).

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

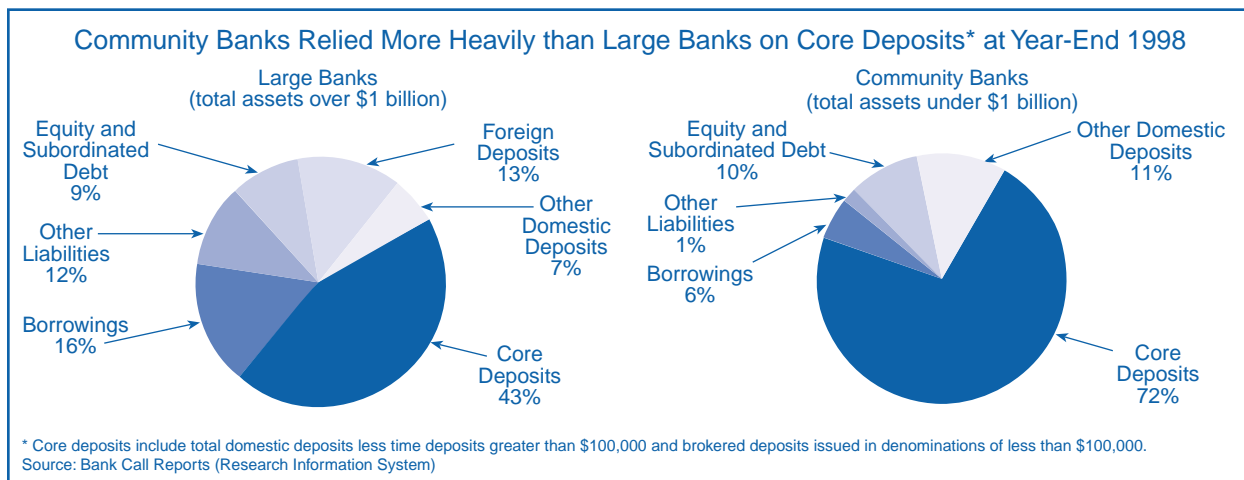
CHART 4



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.

⁵ 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,⁶ 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.

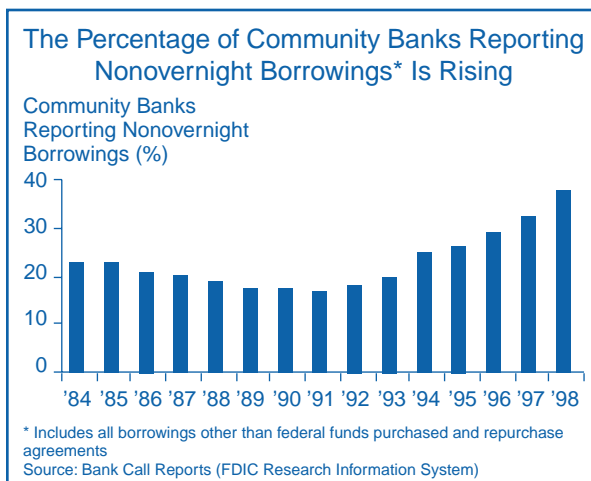
Federal Home Loan Bank Membership

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,

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



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

*Survey*⁷ 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

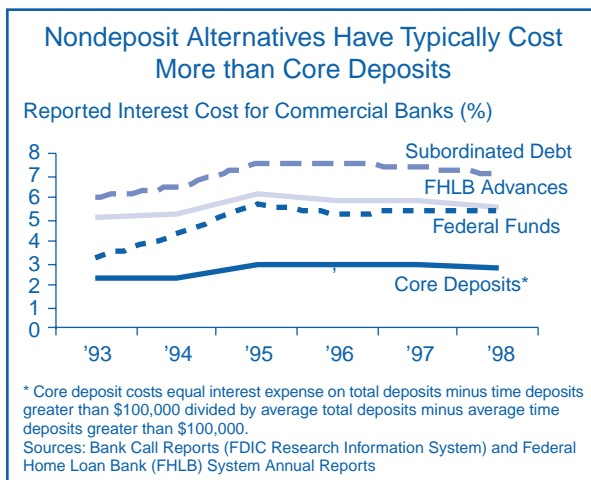
According to community banker opinion surveys, the trend toward greater reliance on noncore or alternative funding sources appears likely to continue. *Grant Thornton's 1999 Annual Survey of Community Bank Executives* found that 75 percent of community bankers expect funding with core deposits to be 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*

⁷ *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.⁸ 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.

⁸ *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

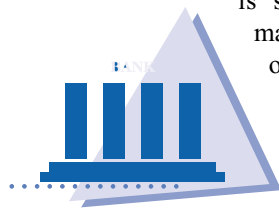
TABLE 1

COMPARISON OF BANKS WITH HIGH AND LOW LEVELS OF CORE DEPOSIT FUNDING						
	ALL COMMUNITY BANKS ¹		COMMUNITY BANK AGRICULTURAL LENDERS ²		COMMUNITY BANK COMMERCIAL LENDERS ³	
	HIGH CORE DEPOSIT FUNDING ⁴	LOW CORE DEPOSIT FUNDING ⁴	HIGH CORE DEPOSIT FUNDING	LOW CORE DEPOSIT FUNDING	HIGH CORE DEPOSIT FUNDING	LOW CORE DEPOSIT FUNDING
SELECTED AGGREGATE MEASURES						
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
SELECTED MEDIAN LIQUIDITY AND FUNDING MEASURES (%)						
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
SELECTED MEDIAN PERFORMANCE RATIOS (%)						
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 ⁵	8.17	8.02	8.24	7.89	8.45	8.26
COST OF FUNDING EARNING ASSETS ⁶	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 ⁷	69.01	63.68	68.59	57.48	68.99	67.00
SELECTED MEDIAN CREDIT QUALITY MEASURES (%)						
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

¹ COMMUNITY BANKS ARE BANKS WITH \$1 BILLION OR LESS IN TOTAL ASSETS.
² AGRICULTURAL LENDERS ARE BANKS WITH 25 PERCENT OR MORE OF ASSETS IN AGRICULTURAL REAL ESTATE LOANS OR AGRICULTURAL PRODUCTION LOANS.
³ COMMERCIAL LENDERS ARE BANKS WITH 25 PERCENT OR MORE OF ASSETS IN COMMERCIAL AND COMMERCIAL REAL ESTATE LOANS.
⁴ 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.
⁵ GROSS EARNING ASSET YIELD EQUALS INTEREST INCOME DIVIDED BY AVERAGE EARNING ASSETS.
⁶ COST OF FUNDING EARNING ASSETS EQUALS INTEREST EXPENSE DIVIDED BY AVERAGE EARNING ASSETS.
⁷ 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.⁹ 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*

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

Regional Perspectives

- Sustained agricultural and industrial commodity price weakness could adversely affect the Atlanta Region. Hogs, soybeans, and cotton are among the Region's farm commodities that have witnessed significant price pressures in recent years.
- In the industrial markets, steel, textiles and apparel, and pulp and paper producers experienced the effects of increased imports and weak export demand because of the strength of the dollar and the Asian economic crisis.
- The disparity between loan and deposit growth during this economic expansion has resulted in an increase in borrowings at banks in the Region. Longer-term trends suggest that factors other than the business cycle may be affecting bank funding.

Commodity Price Weakness Could Affect the Atlanta Region's Economy

Price weakness in agricultural and industrial commodities markets is due to a number of factors, including low inflationary expectations, overcapacity resulting from excess investment, and curtailed global demand in the wake of emerging-market crises. For further analysis, see *Falling Prices in Commodities and Manufacturing Pose Continuing Risks to Credit Quality*, page 3. If sustained, commodity price weakness could adversely affect the Atlanta Region's economy, given the importance of agriculture and manufacturing in the Region.

Overall economic growth in the Atlanta Region remains strong. In April 1999, employment in the Region was up 3.0 percent compared to the national increase of 2.3 percent. However, most gains were occurring in larger metropolitan areas, which have greater economic diversity. Rural and smaller metropolitan areas—where many of the industries facing price pressures are located—saw less pronounced growth. Persistent price stagnation could lead to further layoffs in manufacturing and financial stress on the Region's farmers, and could ultimately affect credit quality.

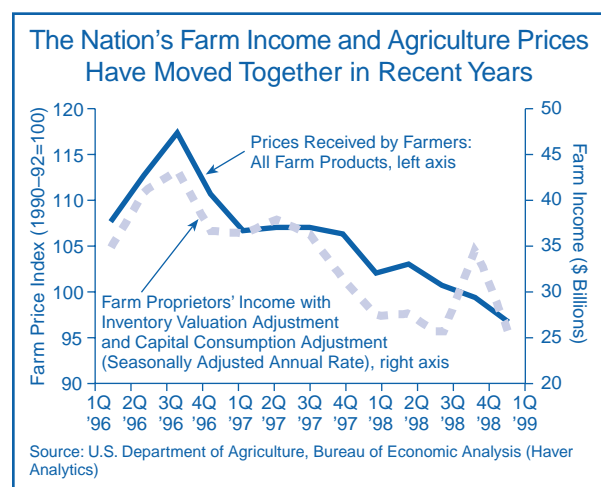
Agricultural Prices Continue to Decline

Agriculture commodity prices have been declining since 1996. In the first quarter of 1999, prices for all farm products were down 5.2 percent from one year earlier and were 21 percent below their peak in the third quarter of 1996. According to *Bureau of Economic Analysis* data, this decline in agriculture prices has been paralleled by a drop in farm income (Chart 1). (Note

that in the fourth quarter of 1998, nominal farm income did rise, but this likely was the result of the approval of an additional \$6 billion in federal farm aid in October 1998.) Declines in agriculture income can have a ripple effect on rural communities as farmers scale back consumption and purchases of farm equipment. Long-term price declines also could affect farmers' ability to service loans and ultimately could pressure farmland values, which are often used as collateral for loans. In the Atlanta Region, hog farming, soybeans, and cotton, all economically important sectors of agriculture, have experienced price declines.

Hog farming has seen dramatic growth in the Atlanta Region in recent years, with every state in the Region

CHART 1



Regional Perspectives

now engaged in the industry. The industry is most heavily concentrated in **North Carolina**, which accounted for 15.7 percent of the nation's hog and pig inventory in 1997; North Carolina inventories have tripled over the past 10 years, according to the *U.S. Department of Agriculture (USDA)*.

Considerable media attention was given to the dramatic hog price declines in late 1998. In December, hog prices stood at \$13.79/cwt,¹ less than half the level at the end of the third quarter of 1998 and the lowest level in more than three decades. Most analysts give hog farmers a break-even price of around \$35/cwt. The dip has been transitory, however, as prices rebounded to nearly \$37/cwt by May 1999. The recent volatility in hog prices likely was an aberration, as the pork industry was coming off a period of high production while slaughterhouse capacity was at low levels and thus unable to process pigs quickly. In that case, the recent sharp drop and recovery in prices, though causing short-term pain for the industry, may not affect hog farmers in the future.

Despite the recent rebound, hog prices remain well below the year-ago level and below the long-term trend (Chart 2). According to data from the *Wall Street Journal*, since July 1988, the trend in hog prices has been slightly negative. Many analysts attribute the downward trend to structural changes in the industry. Technological and organizational (vertical integration and contracting) changes have resulted in a trend toward larger farms and greater specialization. Economies of scale

¹ cwt = 100 pounds.

that the larger farms enjoy have placed downward pressure on hog prices over the long term and may make it increasingly difficult for smaller producers to compete. Recent short-term price declines may have exacerbated competitive pressures on smaller producers.

In recent years, supply and demand shifts have resulted in downward pressure on soybean prices. The United States and other nations, such as Brazil, have seen bumper crops, while the crisis in Asia has crimped demand. In May 1999, soybean prices fell to \$4.53/bushel (Chart 3), down nearly 30 percent from one year earlier to their lowest level in more than 20 years. According to the USDA, U.S. soybean production in 1999 may reach record levels, which may offset any improvement in Asian demand and lead to continued price weakness. The USDA forecasts soybean prices to level off at \$4.35/bushel in 2000. In the longer term, U.S. farmers may face further global competition as foreign acreage and yields climb. In April 1999, a buyers' group in North Carolina contracted to purchase 75,000 tons of soybeans from Brazil for use as feed. According to a recent *Wall Street Journal* article, Brazil, seeing surging agricultural exports because of its recently devalued currency, may be able to open several million acres of land for soybean farming in its western savanna. The Atlanta Region's soybean production is concentrated near coastal areas, particularly in eastern portions of the Carolinas.

Price weakness persists in the cotton market. In May 1999, the price of cotton was 56 cents/lb., down nearly 14 percent from one year earlier and down nearly 50 percent from its previous peak in the summer of 1995 (Chart 3).

CHART 2

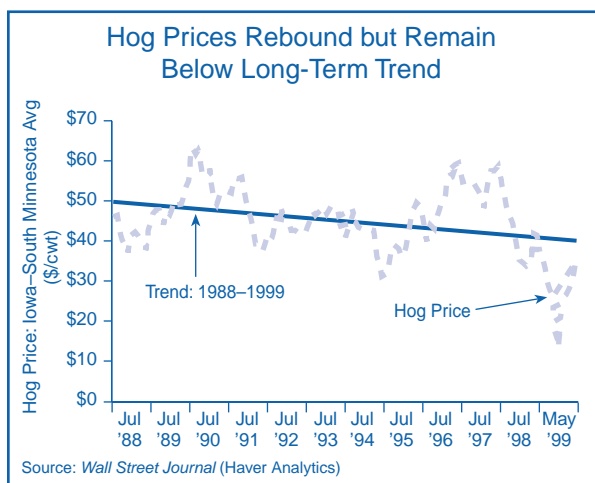
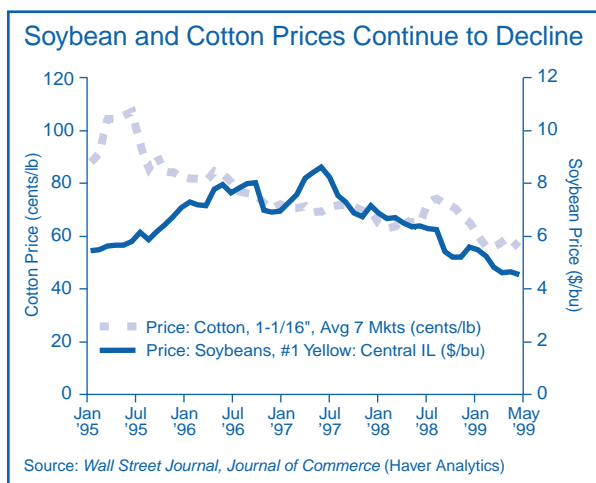


CHART 3



Despite weak prices that are near or at the break-even point, the USDA anticipates that farmers nationwide will continue to shift into cotton as competing crops are expected to bring lower prices. Cotton farming in the Atlanta Region exists in all states except **West Virginia**, with production concentrated in **Alabama, Georgia,** and North Carolina. In 1998, poor weather and low prices aggravated the financial situation of many farmers in the Region, particularly in South Georgia.

Potential implications for insured institutions will depend on the magnitude and duration of the price declines in agriculture. If recent price declines prove to be transitory, many farmers may be able to meet current obligations by placing crops under marketing loans or having lenders capitalize interest on debt, according to a recent report from the *College of Agricultural, Consumer, and Environmental Sciences at the University of Illinois at Urbana-Champaign*. However, if the nation's agricultural sector has entered a prolonged period of price stagnation, especially if it is accompanied by declines in farm property values, farm credit quality could deteriorate. In the Atlanta Region, agricultural credit risk is most heavily concentrated in Georgia, where 28 of the Region's 39 agriculture banks, with \$1.6 billion in assets, are located. (For a detailed discussion of agriculture in the Atlanta Region, see *Atlanta Regional Outlook*, First Quarter 1998.)

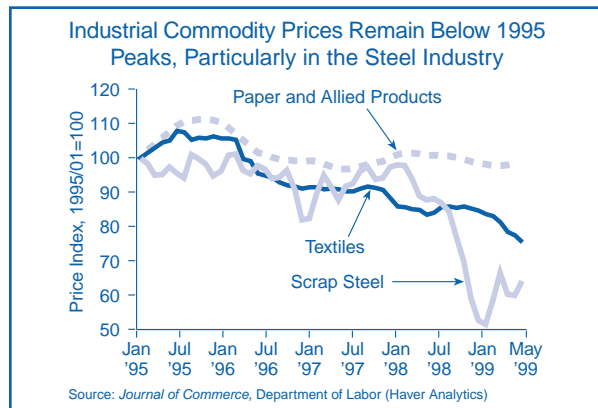
Industrial Commodity Prices Are Also Declining

A strong U.S. dollar and economic and financial turmoil overseas have depressed prices for several key industrial commodities produced in the Atlanta Region. Many Asian and Latin American nations are in a lingering recession that has depressed consumption and may have created a dependence on export trade as a means of recovery. The U.S. economy is among the few displaying strong growth, resulting in a severe and growing imbalance between imports and exports in the steel, textile and apparel, and paper and allied products markets.



The American steel industry was restructured in the 1980s, and as a result of major capital investments, productivity was enhanced, but thousands of jobs were lost. The steel industry is now experiencing a challenge from foreign imports. Recently, steel imports reached record levels, and prices have declined sharply (see Chart 4). U.S. manufacturers claim profits have suffered as they

CHART 4



compete with imports sold at prices well below the cost of production. According to Curtis H. Barnette, president and chief executive officer of *Bethlehem Steel Corporation*, the surge in steel imports has caused over 10,000 layoffs and an increase in the number of steel laborers working reduced hours or receiving reduced pay incentives. The growing trade imbalance within the industry has resulted in substantial production cuts, lost or cancelled orders, and significant price declines. Although the volume of imported steel has dropped slightly in recent months, the levels remain well above those prior to the collapse of many Asian economies, and industry recovery is expected to be slow.

Weirton Steel, West Virginia's second largest private employer, laid off about 25 percent of its workforce (1,000 workers) last Christmas as a result of increasing losses. The company has sustained \$41.5 million in losses since steel imports began flooding U.S. markets. However, the *Associated Press* reported that increased demand for tin-plated steel in recent months has brought about the recall of nearly half the displaced workers. Some steel producers in Alabama and North Carolina have adopted "no layoff" policies to preserve loyalty and motivate their workforce; however, such practices may have resulted in lower wages through the reduction or elimination of bonuses and overtime. Weekly wage rates generally have declined in Alabama, Georgia, **Virginia**, and West Virginia over year-ago levels, and average weekly work hours of steelworkers in the Atlanta Region have declined in all states, with the sharpest declines occurring in Virginia and West Virginia. Fewer work hours and lower wages may increase the likelihood that consumer credit quality in these areas will deteriorate.

Foreign economic turmoil has hastened the ongoing secular decline in the textile and apparel industries. The

Asian crisis has been particularly troublesome for apparel producers, as lower incomes and currency depreciation have left Asian consumers with less money to purchase U.S. merchandise. Currency depreciation also has led to deep discounting by Asian producers in an effort to keep their factories operating. The *Journal of Commerce* reported that U.S. exporters expected sales to Japan to exceed \$1 billion in 1998, but instead sales declined nearly 30 percent to \$675 million, of which \$424 million was attributed to the apparel industry. The *U.S. Department of Labor* reported that apparel prices fell 1.5 percent last year, leading U.S. manufacturers to move some operations to Mexico and the Caribbean, where labor is less expensive.

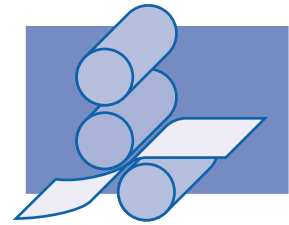
The Atlanta Region produces nearly 23 percent of all apparel manufactured in the United States, with North Carolina, Georgia, and Alabama having the largest concentration of apparel-related employment. (For a detailed discussion of the textiles and apparel industries in the Atlanta Region, see *Atlanta Regional Outlook*, Second Quarter 1998.) Apparel jobs are leaving Georgia faster than any other state in the South, according to the *Atlanta Business Chronicle*. Within the past year, plant closings and layoffs have cost nearly 1,500 jobs in both Georgia and Alabama, as well as several hundred in North Carolina. Displaced workers throughout the Region are increasingly seeking public assistance, as their efforts to find work have resulted in lower paying jobs, according to Harris Ryanor, southern regional director of the *Union of Needletrades, Industrial and Textile Employees* in Union City, Georgia.

While the Asian crisis has resulted in decreased exports for most commodities, strong domestic demand has provided some measure of stability to certain sectors of the textile industry. Textile manufacturers in the Atlanta Region account for over 72 percent of all textile jobs in the nation. A strong housing market has increased sales for carpet and fabrics used in home furnishings and has kept prices relatively stable. A slowdown in home sales and construction could disrupt this demand, however.

Since 1995, nearly 44,000 jobs in the Atlanta Region have been eliminated in the textile industry. North Carolina, Georgia, and **South Carolina** have the highest concentration of industry workers. Textile job losses have been especially high in the production of synthetic fabrics, where Asian competition has been strongest. Prices of some fabric categories have declined by as much as 40 percent. All states within the Region have seen an increase in job losses in the textile industry; however, the Carolinas have experienced the greatest number of layoffs.

Weakness in the Asian and Latin American economies has reduced demand for paper and allied products, which has driven down prices.

Exports of pulp and paper to Asia have deteriorated in recent years, partly because of weaker currencies relative to the U.S. dollar but also because of structural changes brought about by increased automation and modernization of paper mills throughout the world. Greater efficiency and lower demand have resulted in moderately high pulp inventory levels. Low-cost paper mills, particularly in Asian countries, are reducing overcapacity by offering products in U.S. markets at reduced prices, making it difficult for U.S. companies to compete. The *U.S. Industry and Trade Outlook '99* reports that pulp exports represented slightly less than 55 percent of the volume of all U.S. market pulp shipments in 1998—the lowest market share this decade. The pulp and paper industry is vital to many areas of the Atlanta Region, with Georgia and Alabama having the highest exposure. As a result of global pressures, plant shutdowns and layoffs have become common throughout the Region. (For a detailed discussion of the pulp and paper industry in the Atlanta Region, see *Atlanta Regional Outlook*, Third Quarter 1998.) Some analysts expect the pulp market to start rebounding soon because of the slow improvement in economic conditions in Asia.



Funding Issues Affect Commercial Banks in the Atlanta Region

Bank funding has changed considerably in the 1990s (see *Shifting Funding Trends Pose Challenges for Community Banks*, page 11). Change has been driven, in part, by cyclical factors since the current economic expansion began in 1992, but there are differences in the way the industry is funded when compared with previous expansions. Most notably, loan growth has increased relative to deposit growth more than in past cycles. This situation has contributed to a shift away from traditional core² deposits toward alternative funding sources such as noncore³ deposits and borrowings.⁴ This analysis examines funding changes at banks in the Atlanta Region, the factors driving those changes, and potential risks.

Deposits have declined steadily as a percentage of assets at commercial banks in the Atlanta Region since the current economic expansion began in 1992 (see Chart 5). This trend has been consistent across large and small banks. It is not uncommon for loan demand to outstrip deposit growth during cyclical expansions, but, as Chart 5 shows, such a sharp and sustained decline in

deposits relative to assets did not occur during the previous expansion in the 1980s. This shift suggests that factors other than the business cycle are influencing bank funding decisions. As discussed below, the move from deposits to borrowings appears to be occurring both from necessity, as competition from nonbank financial services providers has slowed bank deposit growth, and opportunity, as funding alternatives available to banks have increased.

Competition from Nonbank Financial Services Providers Is Affecting Insured Institution Deposit Growth

The slowdown in bank deposit growth has resulted, in part, from increased competition from nonbank financial services providers, such as mutual funds and, to a lesser extent, credit unions. Unquestionably, high returns in the financial markets have helped the mutual fund industry garner a substantial and growing share of each household dollar in the 1990s. Fund flow data suggest that there has been a demographic shift from a “saver” to an “investor” focus in recent years, as individuals are placing a larger share of their financial assets in the capital markets rather than in insured bank deposits.

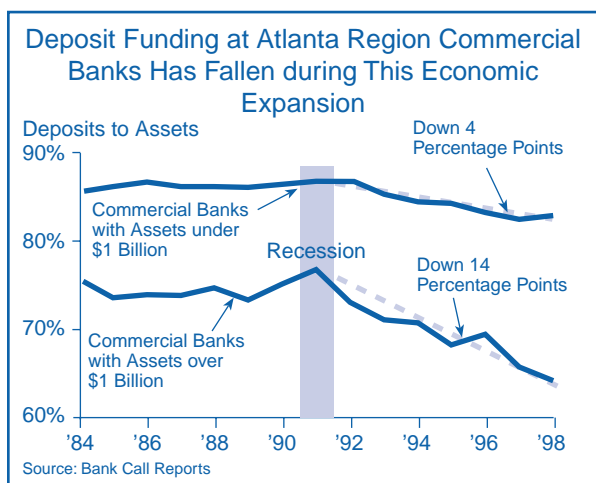
The *Investment Company Institute*⁵ (ICI) reports that net new cash flow into mutual funds (equity, bond, and money market funds) reached a record \$477 billion in 1998, surpassing the previous record of \$374 billion set in 1997. Moreover, during the five-year period from 1994 to 1998, nearly \$1.5 trillion of new money flowed into mutual funds, compared with only \$300 billion a decade earlier from 1984 to 1988 (a 400 percent increase). Mutual fund penetration also has grown steadily, as 44 percent of all U.S. households held mutual fund investments in 1998 compared with 24 percent 10 years earlier. It is likely that growth in the mutual fund sector, to some extent, is coming at the expense of the banking industry. Banks in the Atlanta Region may face even stronger competition with mutual funds relative to their out-of-region peers, as ICI demographic statistics show the nation’s highest concentration of mutual fund ownership to be in the southern states.

² Core deposits include all transaction, savings, and money market deposits, as well as time deposits less than \$100,000. Core deposits typically are viewed as a stable source of funding for insured institutions.

³ Noncore deposits include time deposits over \$100,000, foreign deposits, and deposits placed through a broker. These are considered more volatile than core deposits.

⁴ Borrowings include federal funds purchased, securities sold under agreements to repurchase, demand notes issued to the U.S. Treasury, mortgages and capitalized lease obligations, and any other borrowed money.

CHART 5



⁵ The Investment Company Institute, based in Washington, D.C., is the national association of the mutual fund investment industry.

Regional Perspectives

Nonbank financial services providers have been successful in capturing market share during the 1990s. Chart 6 shows, at the national level, the growth in total funds held by various financial services providers (banks and thrifts, mutual funds, and credit unions) from 1991 to 1998, as reported in the *Federal Reserve Board's* Flow of Funds data. The chart illustrates how successful insured institution competitors have been in increasing their share of the nation's financial assets. Equity and bond mutual funds have been the big winners; their asset volume has grown nearly fivefold since 1991. Meanwhile, money market mutual fund assets (perhaps the closest substitute to insured institution core deposits) have risen by 150 percent since 1991. In fact, money market funds took in more new investment dollars (\$235 billion) than bond and equity funds combined in 1998. (The increased flow into money market mutual funds in 1998 may have been a "flight to quality" surrounding the equity and bond market declines that occurred in the third quarter.)

Credit union deposits also have grown at a faster rate than bank deposits in the 1990s. Chart 6 shows that credit union deposits grew nearly 60 percent from 1991 to 1998, compared with only 14 percent for bank and thrift deposits. As indicated by the bold line on Chart 6, slow deposit growth has led insured institutions to rely increasingly on borrowings to meet funding needs since 1992. *Regional Flow of Funds data are not available, but Call Report data suggest that deposit and borrowing trends at insured institutions in the Atlanta Region are similar to the national trends.*

The mutual fund industry now holds the largest share of financial assets. Chart 7 presents the *Federal Reserve*

Board's Flow of Funds data in dollars rather than as an index. As seen in the chart, insured institutions were losing deposit volume to competitors from 1991 until about 1994 (consistent with the 14 percent increase in total deposits from 1991 to 1998 shown in the previous chart). That equates to an average annual growth of 1.85 percent, which was less than the average interest being credited on deposits over that period. Chart 7 also shows that dollars held by the mutual fund industry actually eclipsed total bank and thrift deposits in 1996 and that the gap has continued to widen. Finally, it is important to note that credit union deposits, despite their strong growth in recent years, remain nominal relative to total deposits held by banks and thrifts.

Bank Funding Has Diversified as More Alternatives Have Become Available

Consistent with the national trend, banks in the Atlanta Region are relying more on borrowings to meet their funding needs. Chart 8 (next page) breaks down each new dollar of funding raised by commercial banks in the Region in 1998 into its components—core deposits, noncore deposits, borrowings, and equity—and compares that to the composition of new funds in 1988. Borrowings represented a much larger share of new funds in 1998 than in 1988 at both large and small banks in the Region. The increase in borrowings primarily offset a decline in large time deposits at both groups of banks, although large time deposits still make up the bulk of community bank noncore funding in the Region. Both groups, meanwhile, funded a larger portion of their asset growth with equity rather than interest-bearing liabilities in 1998 than in 1988, which is consistent with

CHART 6

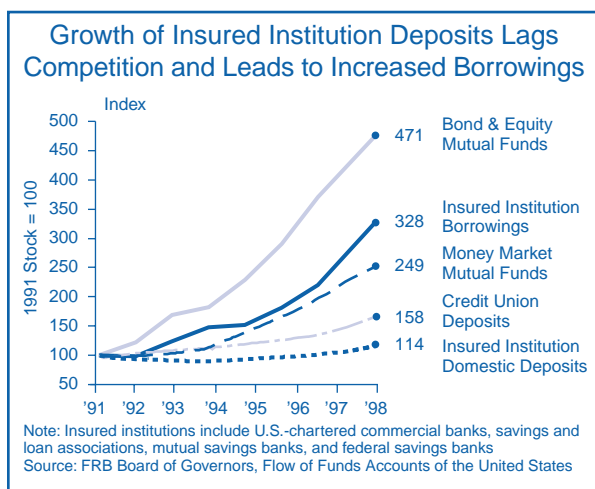


CHART 7

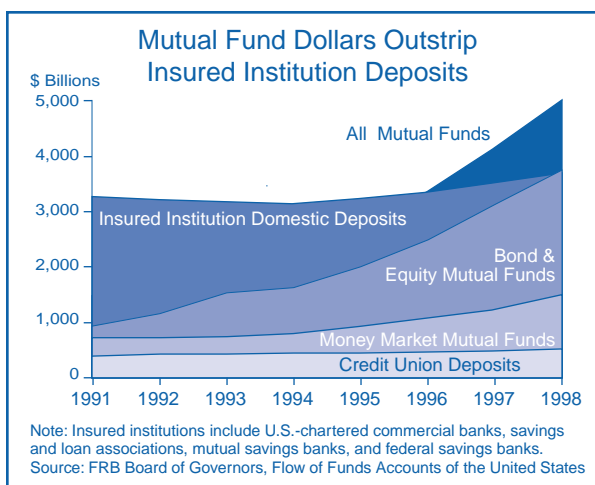
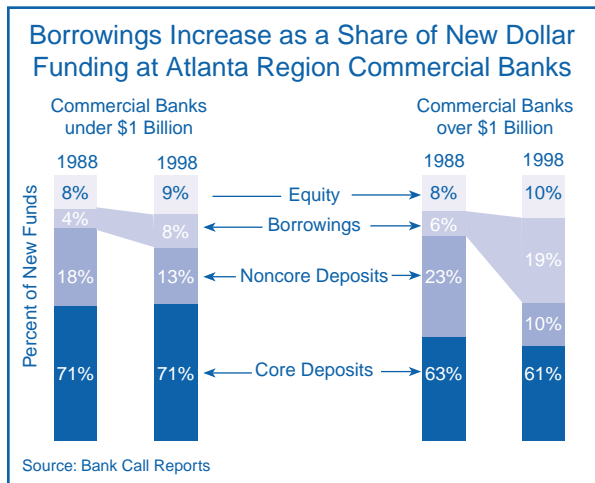


CHART 8

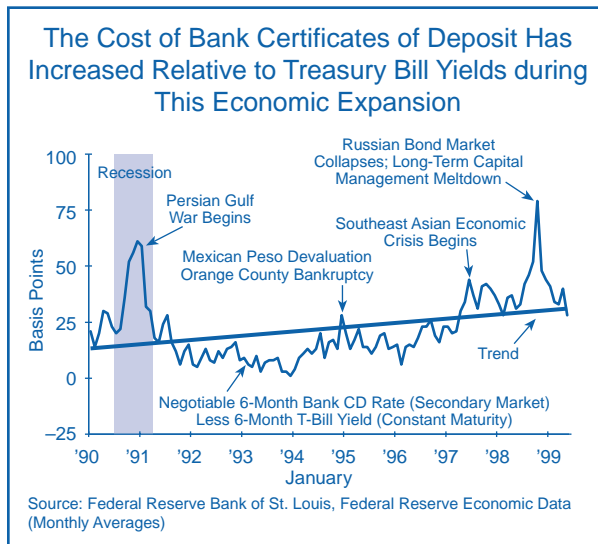


generally higher equity levels across the industry in the 1990s. It is important to note that, while core deposits were essentially unchanged as a percent of *new* funding in 1998 compared with 1988, core deposits have declined relative to assets at both large and small banks in the Region over the past 10 years.

The shift from large time deposits to borrowings seen in Chart 8 may be related to an increase in the relative cost of large time deposits over the past few years. Chart 9 shows that, at the national level, the spread between negotiable (over \$100,000) bank certificates of deposit and a benchmark six-month U.S. Treasury bill has increased since 1994. This is notable in that, according to a 1990 report by *Citicorp* entitled *Interest Rate Spreads Analysis: Managing and Reducing Rate Exposures*, this spread normally narrows during periods of recovery and economic stability. As seen in the chart, the spread has widened as expected during periods of economic uncertainty, such as the recession in 1990 and the Russian bond market collapse last year. But the fact that the spread has been increasing despite stable economic growth may signal that banks relying on this type of noncore funding must pay higher rates in response to increased competition from within the banking industry and from nonbank financial services providers.

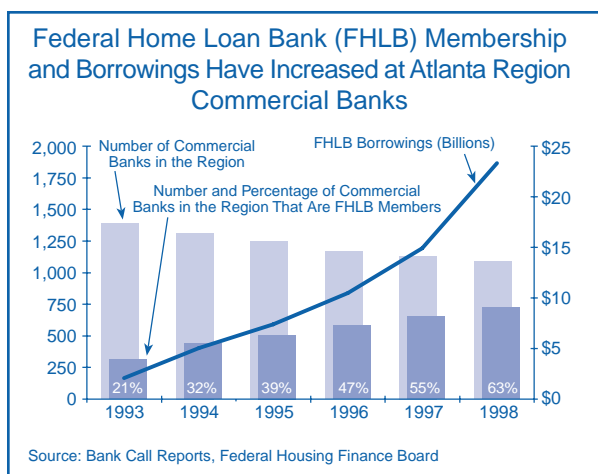
In addition to competitive factors, the industry's shift from deposits to borrowings may be a result of greater access to borrowed funds. The increase in borrowings by both large and small banks in the Atlanta Region has coincided with commercial banks gaining access to the Federal Home Loan Bank (FHLB) system with the passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989. As shown in Chart 10, mem-

CHART 9



bership in and advances from the FHLB system have been popular among Atlanta Region banks. From 1993 (earliest available data) to 1998, the number of commercial banks in the Atlanta Region that were members of the FHLB system more than doubled, from 310 to 725. Moreover, outstanding advances increased more than tenfold, from \$2 billion to \$23 billion, over that period. FHLB penetration within the Region has grown steadily as well, as membership has increased from one in five banks (21 percent) in 1993 to nearly two of every three banks (63 percent) in 1998. As of year-end 1998, 72 percent of banks in the Region with assets over \$1 billion were FHLB members, with advances totaling \$20 billion. Community bank membership stood at 63 percent at year-end, and advances totaled \$3.3 billion. Community bank membership is likely to continue to

CHART 10



grow, as the Federal Housing Finance Board amended its membership requirements in 1998 to allow rural banks with assets under \$500 million to use combination business or farm properties on which a residence is located to qualify for FHLB membership.

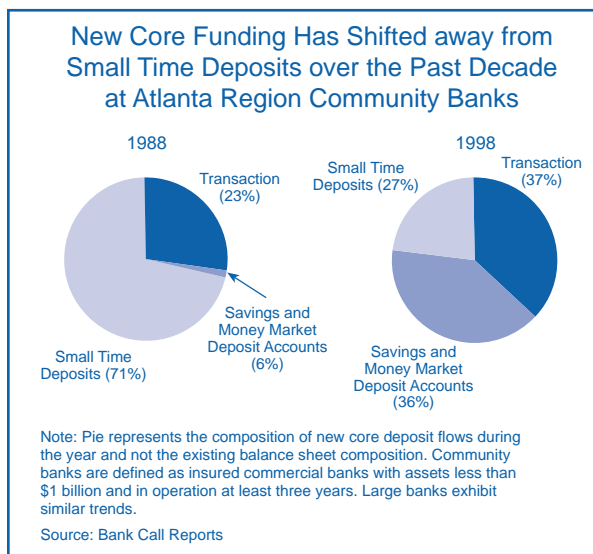
As the Region's overall funding mix has diversified to include more borrowings, the composition of core deposits also has changed. Chart 11 compares the composition of new core deposits raised by community banks in the Atlanta Region in 1998 with that of 1988. Small time deposits, normally a staple of community bank funding, fell sharply from 71 percent of new core funds in 1988 to 27 percent in 1998. This decrease is consistent with balance sheet data for community banks in the Region, which show that small time deposits have declined as a percentage of assets since the late 1980s. This decline may be related to strong growth in the mutual fund sector, as some consumers might view mutual funds and small time deposits as interchangeable products. Also, the fact that savings and money market deposit accounts represent a larger share of new core funds now than in 1988 may imply a "liquidity preference" on the part of depositors to hold nonmaturity deposits rather than time deposits, given today's low interest rate environment. Large banks exhibit trends similar to those shown in Chart 11, the only exception being that transaction accounts have declined at large banks while representing a higher per-

centage of small bank core funding. Transaction accounts, while free of interest costs, can be expensive to maintain depending on transaction frequency, average account balance, and the channel (electronic, automated teller machine, or teller window) customers use to make transactions.

The Community Bank Funding Challenge

Community banks may face greater funding challenges than their larger counterparts. A 1998 survey conducted by the *American Bankers Association* found that 4 of 10 community bankers reported core deposit growth lagging loan demand. In addition, a 1999 *Grant Thornton* survey showed that three of four community bankers believe core funding will be a greater challenge three years from now. Factors that could constrain community bank funding relative to large banks include limited access to the capital markets, a smaller geographic presence from which to solicit deposits, and slower rural population growth. According to an article in the June 7, 1999, *American Banker*, some small banks are soliciting out-of-market deposits to meet loan demand because core deposit growth is insufficient. This strategy could increase interest costs, however, and because many community banks have limited fee income opportunities, they are structurally more reliant than larger banks on spread income from taking deposits and making loans.

CHART 11



Other factors that might affect community banks over the longer term include convergence toward national, rather than local, market pricing as a result of advances in technology. A number of community banks enjoy some pricing power in their local markets, but consumers' ability to shop markets nationally and move money more quickly at lower costs could pressure pricing spreads at certain institutions. Ultimately, this could lead to more volatility in core deposits, which currently fund 72 percent of the Region's community bank assets (compared with 54 percent for large banks). A less stable core deposit base would heighten the need for alternative funding sources, which are limited for many small banks. In a recent issue of *SNL Securities' Bank Investor*, L. Bud Baker, CEO of Wachovia Corporation, alluded to these concerns: "...there is no such thing any longer as a core deposit... you are going to be able to go on the Internet and find the best price for your money...and you can move your money with the punch of a button."

Risk Implications of Funding Changes

A more diverse funding mix can offer benefits with regard to pricing and balance sheet management, but a shift from core to noncore funding is not without new potential risks. With net interest margins already pressured by pricing competition and a flattened yield curve, there is some concern that the higher interest costs normally associated with noncore funding could lead to more risk taking (credit risk or interest rate risk) in search of higher asset yields. That risk may be tempered somewhat by the fact that the noninterest cost of gathering wholesale funds can be less than that of retail funds. The move from core to noncore funding also may have liability-side liquidity implications. As banks turn more attention to alternative funding, there may be less focus on retail deposit gathering. This raises the question of whether banks could recapture deposit share lost

to competitors, such as mutual funds or credit unions, in the event that financial market turmoil or credit quality concerns unexpectedly diminish alternative funding.

Many industry observers believe that the funding challenges facing banks are long term rather than cyclical. Thus, the issues discussed here will only add to the complexity of asset and liability management going forward. Maintaining a cost structure consistent with the mix of retail and wholesale funding will be critical for banks to continue to grow without sacrificing profitability. Regardless of how funds are acquired in the future, insured institution managers must allocate those funds in a manner that can achieve earnings and growth objectives without subjecting institutions to undue credit, interest rate, or liquidity risks.

Atlanta Region Staff

Subscription Form

To obtain a subscription to the FDIC *Regional Outlook*, please print or type the following information:

Institution Name _____

Contact Person _____

Telephone _____

Street Address _____

City, State, Zip Code _____

Please fax or mail this order form to: FDIC Public Information Center
801 17th Street, N.W., Room 100
Washington, D.C. 20434
Fax Number (202) 416-2076

Please indicate below each Region's issue you wish to receive:

Atlanta _____	Dallas _____	New York _____	National _____
Boston _____	Kansas City _____	San Francisco _____	All _____
Chicago _____	Memphis _____		



Federal Deposit Insurance Corporation
Washington, DC 20429-9990

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

**BULK RATE
MAIL**
Postage &
Fees Paid
FDIC
Permit No. G-36