Regional Outlook

FEDERAL DEPOSIT INSURANCE CORPORATION SECOND QUARTER 2000

FDIC
DALLAS
REGION

Regional Perspectives

◆ ***Dallas Region Average Annual Employment Growth Outpaced Other Regions as Decade Ended***—**However, weak performance in the energy, manufacturing, and agricultural sectors resulted in a 1999 growth rate of 2.5 percent, the Region's slowest since 1992.** *See page 3.*

◆ ***Dallas Region Insured Financial Institutions Continued to Report Strong Levels of Profitability and Credit Quality***—**Colorado institutions benefited from the state's robust construction sector, but rapid increases in real estate lending may be cause for concern should the economy slow.** *See page 6.*

◆ ***The Region's Banks and Thrifts Are Experiencing a Lower Cost of Funding than Other FDIC Regions and Greater Exposure to Long-Term Securities***—**Funding sources have not changed significantly; however, banks have shifted to longer-maturity securities, potentially increasing vulnerability to rising interest rates.** *See page 7.*

By the Dallas Region Staff

In Focus This Quarter

◆ ***Banking Risk in the New Economy***—**This article summarizes current economic conditions, with a primary focus on potential risks to insured depository institutions. It explores the implications of long-term trends that have led to the *New Economy.* Recent high rates of economic growth with low inflation have been made possible by increases in productivity arising from new technologies, higher investment spending by businesses, and large-scale industrial restructuring. Underlying these trends has been a financial environment that has largely accommodated the growing borrowing needs of consumers and businesses. Market-based financing, provided in large part through securitizations and mutual funds, has made capital readily available to start-up "new economy" firms as well as mature companies that seek to merge or restructure. Despite the clear benefits of market-based financing in supporting economic activity, there are also concerns. A recurrence of financial market turmoil, such as that experienced in fall 1998, has the potential to quickly change the currently positive economic outlook to one that is far more challenging. Detail is provided on commercial credit quality, market sources of revenue, and other risks to watch in banking.** *See page 11.*

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Regional Perspectives

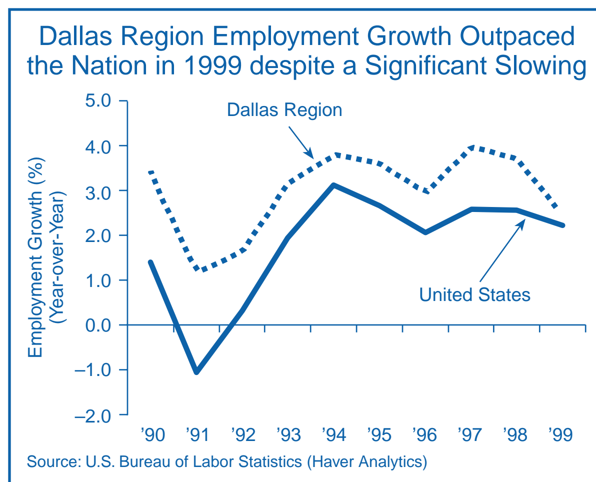
- **The weak performance of the energy, manufacturing, and agricultural sectors is key in explaining why nonfarm employment growth in the Dallas Region slowed substantially in 1999.**
- **Dallas Region insured financial institutions continued to report strong levels of profitability and credit quality; Colorado institutions benefited from a robust construction sector.**
- **The Region's banks and thrifts are experiencing a lower cost of funding and increased exposure to long-term securities in the current rising interest rate environment.**

Dallas Region Average Annual Employment Growth Outpaces Other Regions as Decade Ends

The record-breaking U.S. expansion (109 months and counting as of April 2000) is entering its tenth year. The Dallas Region, however, has experienced 12 years of continued economic growth, whether measured in gross regional product or nonfarm employment, and is entering its thirteenth year of expansion in 2000. The Dallas Region exceeded the nation in employment growth for 11 consecutive years (see Chart 1). In fact, the Dallas Region reported an annual average growth rate of 3 percent during the 1990s, outpacing other FDIC regions in the country.

However, problems in the energy, manufacturing, and agricultural sectors resulted in a 1999 growth rate of 2.5 percent, the Region's slowest since 1992. The slowing of job growth in the goods-producing sectors from 3.5 percent in 1998 to –0.2 percent in 1999 accounted for much of the drag in total nonagricultural employment growth in the Dallas Region (see Table 1). At the same time, the services-producing sectors—transportation, communications, and public utilities; wholesale and retail trade; finance, insurance, and real estate; services; and government—continued to experience rapid growth in 1999 (3.1 percent). The strength in housing, consumer spending, and investment in information technology buoyed these sectors.

Chart 1



Goods-Producing Sectors Held Down Regional Job Growth

The weak performance of the goods-producing sectors of mining, construction, and manufacturing is key in explaining why Dallas Region nonfarm employment grew substantially slower in 1999. Chart 2 (next page) compares job growth in these sectors by state in 1998 and 1999.

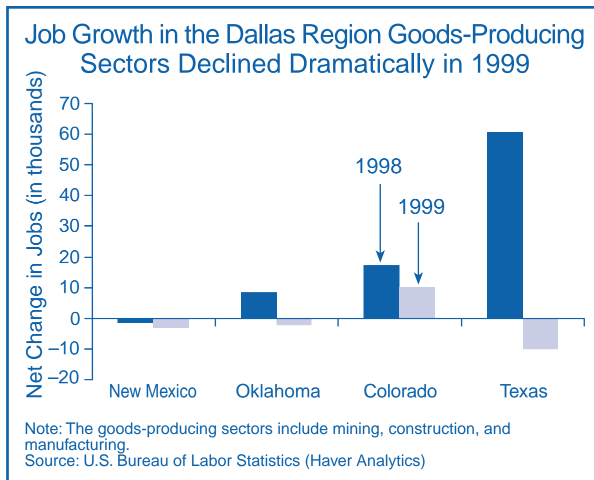
Table 1

Weakness in the Goods-Producing Sectors Depressed the Dallas Region Employment Growth Rate in 1999

	1999 (%)	1998 (%)
Total Nonfarm	2.5	3.7
Goods-Producing Industries	–0.2	3.5
Services-Producing Industries	3.1	3.8

Note: The goods-producing sector includes mining, construction, and manufacturing. The services-producing sector includes transportation, communications, and public utilities; trade; finance, insurance, and real estate; services; and government.
Source: U.S. Bureau of Labor Statistics (Haver Analytics)

CHART 2



Despite rising oil prices throughout 1999, consolidations and layoffs in the oil and gas industry led to significant employment losses in the Region's mining sector. In 1998, over 205,000 workers were employed in the Region's oil and gas extraction industry. In 1999, over 26,000 of these workers—approximately 13 percent of the industry's employment base—lost their jobs. In the wake of these layoffs, rather than rehire workers when prices strengthened, many oil companies chose to pay off accumulated debts. In addition, companies decided to maintain or repair existing wells rather than expand exploration and production.

Oil prices tripled between year-end 1998 and early 2000. Oil-dependent industries (e.g., those related to manufacturing chemical, plastics, and drilling equipment) were particularly hard hit by the significant hike in oil prices.

Manufacturing employment growth was depressed not only by higher energy costs, but also by softness in the Region's exports. Competition from less expensive foreign imports, for example, resulted in continued layoffs in the Region's apparel and textile industries. Furthermore, a plateau in residential construction, coupled with shortages in labor and building materials, negatively affected construction-related manufacturing industries. Finally, weaknesses in the agricultural and oil sectors resulted in declining employment in farm and oil machinery manufacturing.

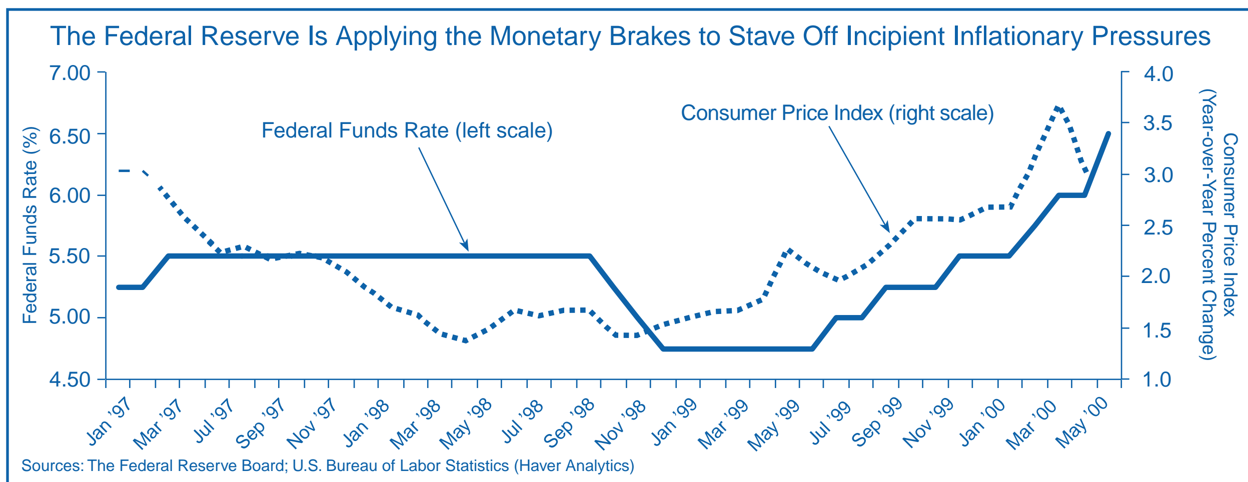
While the Region's construction industry was quite robust, particularly the industrial, retail, and infrastructure sectors, growth slowed from the previous year. However, a few metropolitan areas (e.g., **Oklahoma City** and **Dallas**) reported softening in office and apartment construction.

Major Risks to the Region's Economic Expansion

Although the probability of a recession in 2000 remains small, approximately one in four economists surveyed by the ***National Association of Business Economics*** indicated that a recession could occur sometime this year or next. Scenarios that could result in an end to the Region's current economic expansion include

- ***Continued Rising Interest Rates.*** As of May 16, 2000, the Federal Reserve Board (FRB) has raised the Federal Funds rate 175 basis points since June 1999 in an attempt to slow the U.S. economy and dampen inflationary pressures (see Chart 3). Many

CHART 3



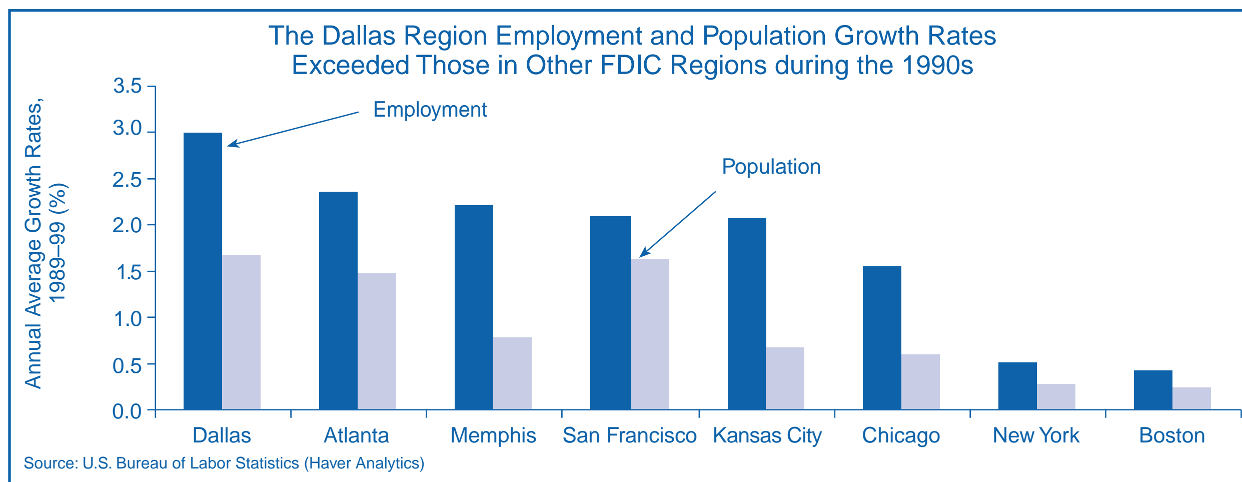
economists and financial analysts view the FRB's growing concern about an overheating economy as an indication that it may continue to raise interest rates. In addition to the broader economic implications, rising rates erode the value of fixed-rate securities, particularly those with longer maturities. As we will discuss later in this article, rising interest rates have implications for the Region's community banks.

- ***Stock Market Correction.*** The recent volatility in equity markets underscores the nervousness investors are feeling about the economy, inflation, rising interest rates, and technology stocks. Major metropolitan areas in the Dallas Region, including **Austin,** Dallas, **Houston**, **Denver**, and **Albuquerque**, are home to many high-tech companies and have particularly benefited from the extended bull market. These areas could be extremely vulnerable to a significant decline in income and spending in the event of an extended bear market because of the highly cyclical nature of high-tech manufacturing and services.[1]

- ***Contagion Effects from Abroad.*** External shocks, such as the Asian currency and the Russian bond crises, or Mexico's 1994–95 peso devaluation, have affected U.S. capital markets and the U.S. economy, particularly in states with large export sectors. Mexico and several other Latin American countries will be holding midyear elections in 2000. Over the past quarter century, currency devaluation has occurred in Mexico every time an election was held, with repercussions felt in the United States. While the Mexican government is trying to avoid a similar situation, economic disruptions there (or in other parts of the world) could negatively affect trade and investment flows in the Dallas Region. In 1999 Mexico alone imported $41.4 billion from **Texas,** or 45 percent of the state's exports. Asian nations also are major trading partners with **Colorado,** Texas, and **New Mexico.**

- ***Growing Pains.*** Average annual employment growth in the Dallas Region outpaced the other FDIC Regions during the 1990s (see Chart 4). However, this growth, driven in large part by lower business costs and living costs than elsewhere in the country, did not come without costs. The flip side of this rapid growth has been the significant migration of people and corporations into the Region, straining the existing infrastructure by increasing congestion and pollution levels and pushing up housing prices and wages. To the extent that these costs continue to climb, businesses may relocate or expand operations elsewhere. These factors alone will not cause a recession but may certainly exacerbate any future downturn; consider the out-migration of people and businesses from the **Northeast** in the late 1980s and from California in the early 1990s after years of rapid growth and subsequent to their economic downturns.

CHART 4



[1] Devol, Ross. July 13, 1999. *America's High-Tech Economy: Growth, Development, and Risks for Metropolitan Areas.* The Milken Institute.

Regional Banking Conditions

Insured financial institutions in the Dallas Region continued to report strong levels of profitability and credit quality during 1999 (see Table 2). The Region's insured institutions tracked the national return on assets (ROA), leverage, and past-due ratios. The Region's banks tend to have a slightly higher net interest margin (NIM) but lower noninterest income, reflecting the Region's high proportion of small banks, which as a group are more reliant on income from loans and investments.[2] As of year-end 1999, 67 percent of the Region's insured institutions held less than $100 million in assets, compared with 57 percent of the nation's insured institutions.

Colorado banks and thrifts reported the Region's strongest performance during 1999. They continued to post an impressive performance, as evidenced by an ROA of 1.60 percent and return on equity (ROE) over 21 percent, higher levels than posted by any other state in the Region. Steady asset yields combined with a low 2.92 percent cost of funds contributed to an ROE that was 6 percentage points higher than the national average. Strong earnings at several of the state's largest institutions helped raise the overall results.

Colorado banks and thrifts enjoy low funding costs largely because non-interest-bearing deposits represented 18 percent of assets at year-end 1999, compared with 11 percent for all banks in the nation. Likewise, core deposits held by Colorado insured institutions averaged 73 percent of total assets at year-end 1999, ranking second in the nation. Past-due loan ratios stood at 1.62 percent, lower than the average for the nation, Region, or

Table 2

Dallas Region Profitability Remained Strong during 1999

	Nation	Region	Dallas Region Sub S	Dallas Region Agricultural Banks	Colorado	New Mexico	Oklahoma	Texas
Return on Assets (%)	1.27	1.22	2.17	1.23	1.60	1.15	1.23	1.16
Return on Equity (%)	14.74	14.72	24.22	11.84	21.22	13.35	13.69	14.01
Net Interest Margin (%)	3.93	4.25	4.86	4.41	5.07	4.58	4.18	4.10
Leverage Ratio (%)	7.82	7.92	9.02	10.16	7.57	7.44	8.20	7.96
Loan-to-Asset Ratio (%)	61.79	58.65	62.89	53.12	53.54	55.36	61.79	59.21
Past-Due Loans (%)	2.00	1.98	2.28	2.76	1.62	2.57	2.04	1.99
Charge-off Rate (%)	0.54	0.43	.026	0.46	0.46	0.38	0.32	0.45
Reserve to Gross Loans Ratio (%)	1.54	1.20	1.15	1.57	1.25	1.34	1.33	1.15
Reserve to Noncurrent (%)	170.13	137.35	102.80	119.21	217.22	130.17	140.35	129.01
Unprofitable (%)	7.33	5.80	2.27	3.87	6.53	6.25	6.45	5.33
Number of Institutions	10,220	1,379	308	310	199	64	310	806

Source: December 31, 1999, Bank and Thrift Call Reports

[2] Small banks are defined as banks with $100 million or less in assets.

any other state in the Region. However, in support of Colorado's robust construction sector, real estate loans represented 64 percent of total loans at year-end 1999, up dramatically from 51 percent three years earlier. This rapid increase in real estate lending may be a cause for concern should the economy slow.

Dallas Region Insured Financial Institutions Benefit from Low Cost of Funds, but Face Challenges in Rising Interest Rate Environment

For several reasons, banks in the Dallas Region are unique. Some differences are based on problems banks experienced during the 1980s (see ***Dallas Regional Outlook,*** fourth quarter 1999). Others relate to a lower level of non-interest income, a mix of assests significantly different from the nation, and the low cost of funds enjoyed by the Region's large number of small community banks.

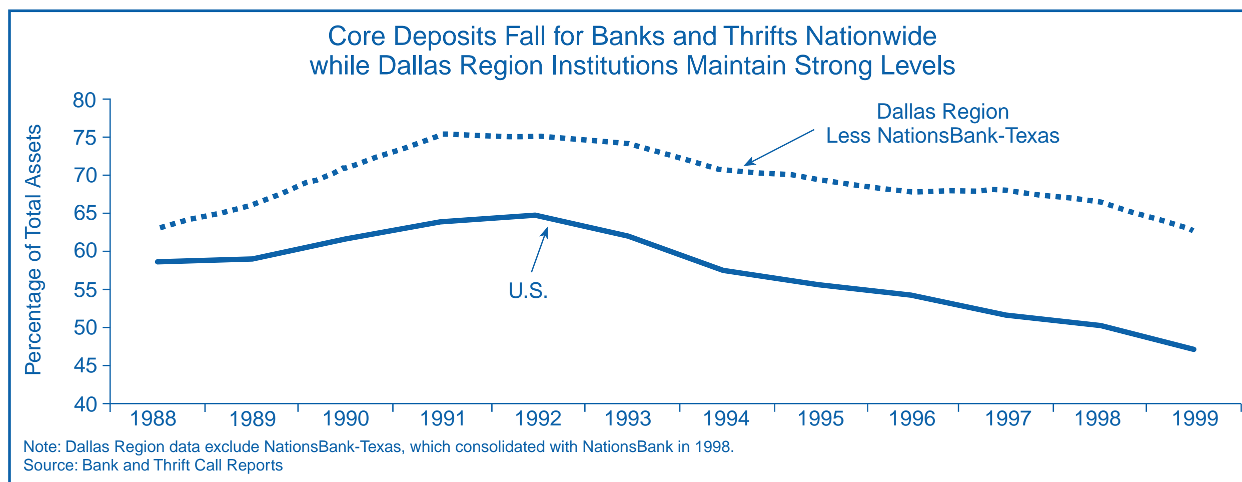
The Region's institutions have maintained higher profitability levels compared with the nation, in large part because of a lower cost of funds (41 basis points lower than the nation), which is supported by the high volume of non-interest-bearing deposits. Nationally, core deposits represented 47 percent of total assets at year-end 1999, compared with a high of 65 percent in 1992 (see Chart 5). During the same time, institutions in the Dallas Region enjoyed a relatively higher level of core deposits as a percentage of assets (core deposit rate) and reported less decline in this more stable form of funding. In fact, the gap between the nation's and the Dallas Region's core deposit rates has never been greater. In 1988, for example, the difference was 7.5 percentage points. As of year-end 1999, it had more than doubled to 15.6 percent.

Dallas Region institutions also hold a higher percentage of non-interest-bearing deposits than those of the nation as a whole. At December 31, 1999, 16 percent of the Region's total assets were held in non-interest-bearing deposits, compared with 11 percent for the nation. However, a recent legislative development may affect banks' cost of funding. On March 29, 2000, the House Banking Committee passed House Resolution 4067, a proposal that would allow banks to pay interest on business accounts. While the bill's language currently includes a three-year waiting period, the legislation, if enacted, could increase the cost of funding for most banks.

The difference in funding costs between the Region and the nation is also attributable to the Region's disproportionate share of small banks, which represent 67 percent of all its insured institutions. Smaller institutions may be able to provide more personal banking relationships, which may help them maintain high core-deposit levels. In any case, this more stable source of funding contrasts with the national trend but may be more prevalent in areas of the country with a greater proportion of small banks. While many institutions consider core deposits to be a source of long-term funding, these deposits can be interest-rate sensitive and may cause funding costs to increase in a rising rate environment.

Larger banks, with access to a wider range of non-interest-income sources, traditionally have been more

CHART 5



Note: Dallas Region data exclude NationsBank-Texas, which consolidated with NationsBank in 1998.
Source: Bank and Thrift Call Reports

successful than smaller banks at diversifying revenue streams. The NIM for the Region's banks is 34 basis points higher than the NIM for the nation's banks. Conversely, the Region's 1.99 percent non-interest-income ratio significantly trails the nation's ratio of 2.69 percent. While the nation has been shifting toward greater use of wholesale funding and away from core funding, financial institutions in the Dallas Region hold core deposits at a relatively high level of 65 percent of total assets.

Importantly for the Region's institutions, funding strategies have not shown material changes since 1992. However, while the makeup of liabilities has not changed significantly, the Region's banks have shifted to longer maturities for a large portion of assets, potentially increasing these institutions' vulnerability to rising interest rates.

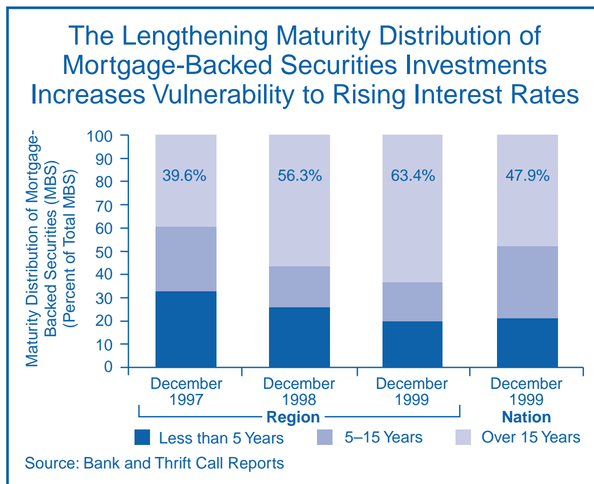
Lengthening Maturity Distribution Increases Vulnerability to Rising Interest Rates

Dallas Region institutions hold a higher proportion of securities to assets than the nation does (26 percent compared with 19 percent as of December 31, 1999). In fact, 394 institutions in the Region hold over 40 percent of assets in securities. Despite generally rising interest rates, maturities for securities, most notably for the Region's holdings of mortgage-backed securities (MBS),[3] have remained extended. MBS with maturities in excess of 15 years, as of year-end 1999, stood at 63 percent of total MBS, up from 40 percent just two years ago (see Chart 6). In comparison, 48 percent of MBS portfolios nationwide were held in long-term securities, up from 33 percent in June 1997.

Price volatility and interest rate movements affected the value of securities held by banks during 1999. At December 31, 1999, the account used to track unrealized gains or losses from securities available for sale was a negative $1.3 billion, a $1.6 billion decline over year-end 1998 (see Chart 7). Although this decline represents only a fraction of total assets, it accounts for 6 percent of equity capital. Moreover, securities classified as held to maturity (representing 22.5 percent and 18.5 percent of all securities in the Region and nation, respectively) are carried on the balance sheet at book value without adjustments for changes in value. The depreciation for these securities increased $800 million during 1999, or 3 percent of equity. If interest rates continue to rise, the income from these securities will be lower than market rates. And, as noted previously, this adverse effect on interest income would likely result in a decline in the overall NIM.

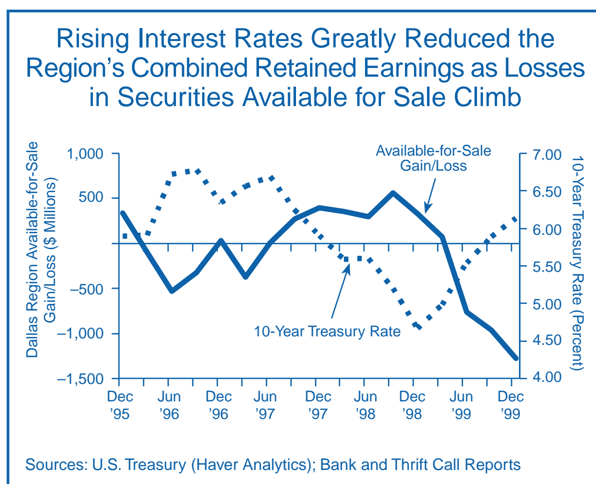
A combination of greater dependence on securities interest income and the yield curve's shape prompted the Region's banks to extend the maturity distribution of securities portfolios during 1998. As shown in Chart 8, the yield curve was relatively flat up to the 20-year mark. To attain a higher yield, the Region's banks extended maturities dramatically. For example, the dollar volume

CHART 6



Source: Bank and Thrift Call Reports

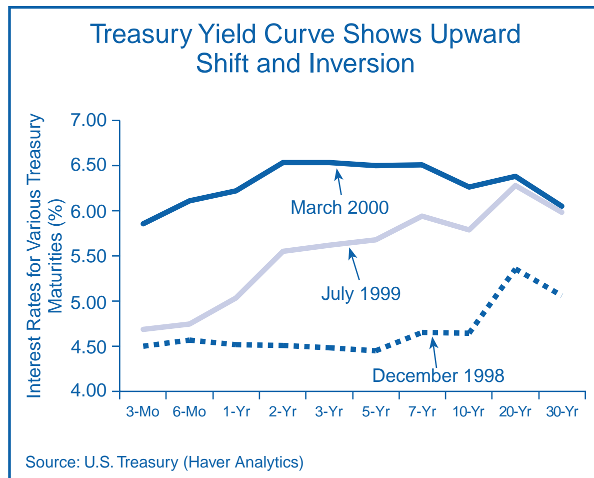
CHART 7



Sources: U.S. Treasury (Haver Analytics); Bank and Thrift Call Reports

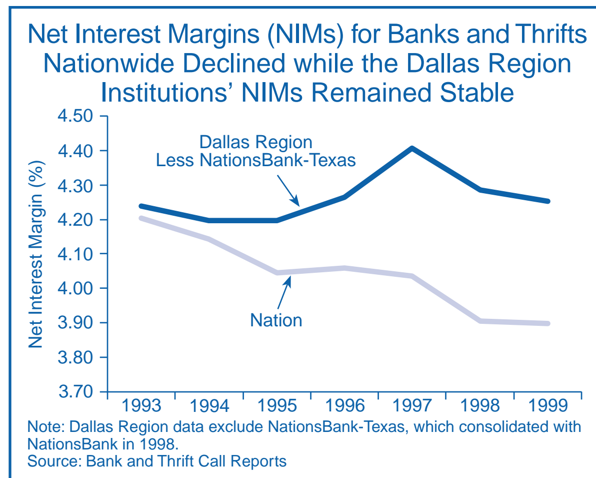
[3] MBS represented 14 percent of the Region's total assets and 53 percent of total securities as of year-end 1999.

CHART 8



Source: U.S. Treasury (Haver Analytics)

CHART 9



Note: Dallas Region data exclude NationsBank-Texas, which consolidated with NationsBank in 1998.
Source: Bank and Thrift Call Reports

of MBS with maturities of at least 15 years increased in the Region by 57 percent during 1998 alone.

Shifting Yield Curve Presents Challenges to Banks

The Federal Reserve has raised short-term interest rates five times for a total of 175 basis points since June 30, 1999. Consequently, the short-term side of the yield curve has risen dramatically from July 1999 to March 2000 (see Chart 8). On January 13, 2000, the Treasury announced the implementation of a plan to buy back as much as $30 billion in older, higher-interest-rate debt, causing the long-term side of the yield curve to fall. The combination of these two factors has created an inverted yield curve, inverting at the two-year mark. Traditionally, an inverted yield curve is considered a harbinger of a recession as short-term interest rates exceed long-term rates. However, the Treasury's action may be complicating this scenario. While short-term rates have risen faster than long-term rates, the entire yield curve is significantly higher than it was at year-end 1998, causing stress for holders of fixed-rate securities.

Dallas Region Net Interest Margin Unaffected by Rate Increases…So Far

Increases in Treasury interest rates have not yet translated into lower NIMs in the Region; however, Dallas Region institutions are vulnerable. First, asset yields may be exposed because of the large portion of the Region's assets invested in long-term fixed-rate securities. As rates increase, the values of the fixed-rate securities decline, and the income received is less than the prevailing market rate. The Region's banks' extension of MBS maturities over the past three years highlights this risk.

Second, on the interest expense side, the Region's funding advantages—strong core deposits and a high volume of non-interest-bearing deposits—may become more vulnerable in a rising interest rate environment. Although core deposits have historically been stable sources of funding and may be less price sensitive than other funding sources, the majority of these deposits display some sensitivity to changes in interest rates and may pressure interest expense in an increasingly competitive marketplace. In addition, pending legislation that would allow for the payment of interest on business checking accounts would likely raise banks' costs. Likewise, customers who hold large balances in below-market or non-interest-bearing accounts may shift excess funds into higher-interest-bearing accounts or move funds to other institutions, perhaps dramatically increasing the cost of funding.

The NIM for the nation declined from 4.2 percent in 1993 to 3.9 percent in 1999 (see Chart 9). During this time, Dallas Region insured financial institutions maintained a NIM consistently above 4.2 percent. However, it takes time for the effects of changes in interest rates to be reflected in the income statement. Consequently, even though the NIM has not been affected, profitability may come under pressure eventually.

Conclusion

While it takes time for interest rate changes to be reflected in earnings, profit, and equity, holding a higher allocation of long-term maturities may expose institutions to higher levels of interest rate risk. As a result, an analysis of how a bank's balance sheet structure would weather different interest-rate scenarios is an important component of risk management, particularly if current holdings include a higher distribution of long-term maturities.

Dallas Region Staff

Banking Risk in the New Economy

The Division of Insurance periodically assesses conditions in the economy and the banking industry to identify and evaluate trends that could adversely affect the performance of insured depository institutions. At this time, the banking industry as a whole continues to enjoy record profits and solid financial ratios.[1] Much of the industry's strength derives from the remarkable performance of the U.S. economy, which has been expanding for the past nine years. This article explores factors that have shaped this unusually robust economic environment and discusses how changes in the economy may create new types of risks for insured depository institutions.

During 1999, the FDIC reported the first annual loss for the Bank Insurance Fund since 1991. This loss primarily resulted from an uptick in unanticipated and high-cost bank failures. Some of these failures were associated with high-risk activities such as subprime lending, and some were related to operational weaknesses and fraud. The emergence of these problems in the midst of a strong economic environment raises concerns about how the condition of the banking industry might change if economic conditions deteriorate.

The Longest U.S. Expansion

In February 2000, the U.S. economy entered its 108th month of expansion, making this the longest period of uninterrupted growth in U.S. history.[2] This record-setting performance has also been marked by a recent acceleration in the rate of real gross domestic product (GDP) growth, which has exceeded 4 percent in each year since 1997. Meanwhile, price inflation has remained relatively subdued. The core inflation rate, which excludes the volatile food and energy components, was just 2.1 percent in 1999, the lowest core rate since 1965.

Recent economic conditions have been highly conducive to strong loan growth, low credit losses, and record earnings for the banking industry. The important question going forward is how long these favorable conditions might last. Is this remarkable economic performance the result of some long-term upward shift in the pace of economic activity, or is it the temporary result of a few transitory factors? More important, are there new and unfamiliar dangers that, at some point, could significantly impair banking industry performance? To evaluate these questions, we must assess the factors that have contributed to recent economic performance and think ahead to possible developments that could end this expansion.

What Is the New Economy?

The term used most often to describe the recent period of economic performance has been somewhat controversial: the *New Economy.* Much of the controversy has arisen because people interpret the term in different ways. Wall Street analysts use the term to refer to the high-technology sectors of the economy, such as computers and software, biotechnology, and especially the Internet. Some of these New Economy firms have been able to raise large amounts of capital and command market valuations in the tens of billions of dollars well in advance of earning a profit or even booking significant cash revenues.

Economists tend to employ the term New Economy in a slightly different way. To them, it refers to evidence that some of the traditional economic relationships have changed. For example, intangible assets now appear to play a much larger role in the valuation of investments than they have in the past.[3] Firms in some industries now may exhibit increasing returns to scale (rather than diminishing returns), reflecting the fact that the value of their product rises as it becomes a de facto industry standard.[4] Individual decision making, too, may be changing. Some believe that investors have reduced the risk premium they demand to hold equity positions

[1] For a recent summary of financial performance and condition of the banking and thrift industries, see the FDIC *Quarterly Banking Profile,* fourth quarter 1999, http://www2.fdic.gov/qbp/.

[2] The chronology of U.S. business cycles is available from the National Bureau of Economic Research, http://www.nber.org/cycles.html.

[3] Nakamura, Leonard. Federal Reserve Bank of Philadelphia. July/August 1999. Intangibles: What Put the New in the New Economy? *Business Review.* http://www.phil.frb.org/files/br/brja99ln.pdf.

[4] Brown, William S. March 2000. Market Failure in the New Economy. *Journal of Economic Issues,* 219–27.

because of their perception that holding equity is not, after all, substantially riskier than holding debt.[5] Such a shift in investor attitudes could help explain why the price-to-earnings ratio for the S&P 500 index has recently approached all-time highs.[6]

Perhaps the most important underlying change in the economy is the relationship between high rates of economic growth and changes in inflation. Economists have long maintained that rapid growth in economic activity has a tendency to lead to excess demand for goods (thereby raising consumer and producer prices) and excess demand for labor (thereby raising wage rates). But during the late 1990s, as growth accelerated and inflation remained low, economists began to reevaluate their notions of these trade-offs. Some argued that the low rate of inflation during this expansion was the fortunate result of temporary factors, such as a strong dollar and low energy prices, both of which could diminish or reverse direction over time.[7] Only a few analysts were so bold as to suggest that the fundamental workings of the economy had changed in such a way as to allow a sustained period of high economic growth with low inflation.

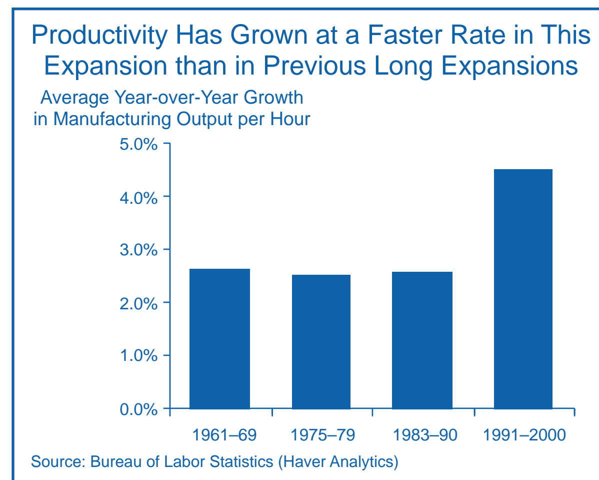
An early Wall Street description of the New Economy appeared in an article released by ***Goldman Sachs*** in January 1997.[8] It describes a number of fundamental changes in the economy—driven by global competition and advancing technology—that may permit business cycle expansions to last longer than they have in the past. At the same time, it warned that longer economic expansions might have a tendency to contribute to greater financial excess and the possibility of more severe recessions and more sluggish recoveries.

If this hypothesis is correct, and an emerging New Economy would contribute to longer expansions and more severe recessions, there may be implications for how banks manage risks. Since the Great Depression, U.S. business cycle recessions have not necessarily been catalysts for large numbers of bank and thrift failures. During the period from 1983 to 1989, when the U.S. economy was in the midst of a long expansion, some 1,855 insured banks and thrifts failed. This wave of failures has been attributed to a variety of factors, including severe regional economic downturns, real-estate-related problems, stress in the agricultural sector, an influx of newly chartered banks and banks that converted charters, and high nominal interest rates.[9] However, the potential for significantly more severe national recessions would represent largely uncharted territory that could cause losses and loss correlations to depart from historical norms, posing a new set of risk management challenges for the industry going forward.

The Productivity Revolution

As the essential element that links faster economic growth and low inflation, productivity growth is the cornerstone of the New Economy. Productivity refers generally to the amount of output that can be obtained from a fixed amount of input. Labor productivity is usually measured in terms of output per hour. Chart 1 shows that output per hour in manufacturing has risen at an average annual rate of 4.5 percent during the current expansion, compared with rates of just over 2.5 percent in the three previous long economic expansions. Moreover, productivity growth accelerated in 1999 to a rate of 6.3 percent. Why is productivity growing so fast now compared with previous expansions? Even economists who believe that economic relationships have funda-

CHART 1



Source: Bureau of Labor Statistics (Haver Analytics)

[5] January 24, 2000. Has the Market Gone Mad? *Fortune.*

[6] September 1999. Earnings: Why They Matter. *Money.*

[7] Brown, Lynn Elaine. Federal Reserve Bank of New England. May/June 1999. U.S. Economic Performance: Good Fortune, Bubble, or New Era? *New England Economic Review.* http://www.bos.frb.org/economic/pdf/neer399a.pdf, and Brinner, Roger E. Federal Reserve Bank of New England. January/February 1999. Is Inflation Dead? *New England Economic Review.* http://www.bos.frb.org/economic/pdf/neer199c.pdf.

[8] Dudley, William C., and Edward F. McKelvey. January 1997. The Brave New Business Cycle: No Recession in Sight. *U.S. Economic Research,* Goldman Sachs.

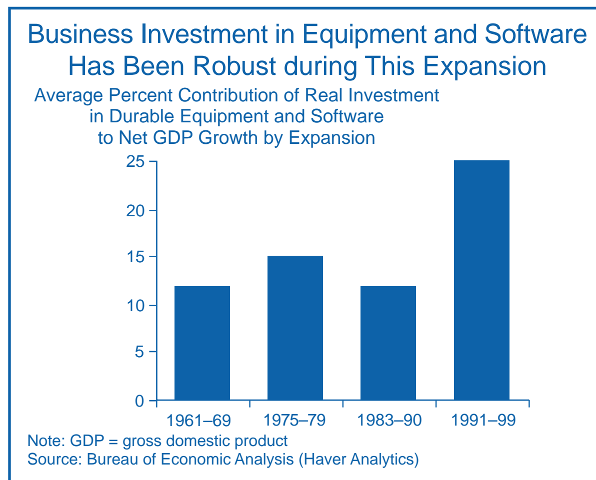
[9] FDIC Division of Research and Statistics. 1997. *History of the Eighties: Lessons for the Future, Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s,* 16–17. http://www.fdic.gov/bank/historical/history/contents.html.

mentally changed are hard-pressed to explain why all of the factors came together in the late 1990s and not before.[10] Still, explanations for the increase in productivity tend to focus on three main factors.

Increased Competition. Expanding global trade during the 1980s and 1990s has subjected U.S. firms to new competition from around the world. Annual U.S. exports of goods and services grew by over 230 percent (after inflation) between 1982 and 1999, while imports grew by 315 percent. The construction of new production facilities around the world in industries such as autos and chemicals has led to excess manufacturing capacity that has kept prices low. In other industries, including air travel, trucking, telecommunications, and banking, competition has been intensified through domestic deregulation. Facing intense competitive pressures and a low rate of general price inflation, firms cannot rely on annual price increases to help expand top-line revenue. Instead, there is pressure to continually cut costs in order to increase earnings. For many firms, this means adopting new technologies and new ways of organizing operations.

Expanded Investment. U.S. firms of all sizes have invested in new technologies at a rapid pace during this expansion. Chart 2 shows that business investment in equipment and software represents almost one-quarter of total net GDP growth during this expansion, compared with around 15 percent or less during previous long expansions. While this investment has been motivated by the need to cut costs, it has also been fueled by the availability of new computer technologies that have fallen in cost over time and by the ready availability of financial capital on favorable terms.

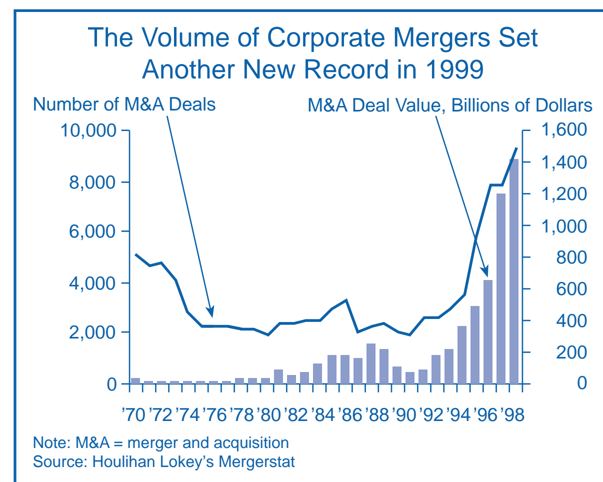
Chart 2



Industrial Restructuring. The third aspect of the productivity revolution is large-scale restructuring in the U.S. corporate sector. Chart 3 shows that both the annual number and dollar volume of mergers in the late 1990s far exceeded the pace of the so-called merger mania of the late 1980s. Two classes of firms are leading the new wave of mergers. First, companies in mature industries such as oil, autos, and banking are faced with excess productive capacity and intense price competition. For these firms, mergers are useful in expanding market share and removing redundant operations. Second, the largest dollar volume of mergers is in some of the most volatile emerging industries, including telecom, media, and the Internet. It is in these sectors of the economy, in particular, where the business models are evolving rapidly and where technological standards are still being determined. Firms in these industries that can grow rapidly through mergers have the chance to achieve long-term market dominance in what appear to be some of the fastest growing industries of the new century.

The implications of the productivity revolution for the banking industry have been decidedly positive. Higher productivity has allowed a long expansion and faster economic growth with low inflation, all of which are conducive to robust financial performance by depository institutions. Higher rates of business investment

Chart 3



[10] One possible explanation is that there is a learning curve for adopting new technologies and that technology diffusion is an inherently slow process. David, Paul A. Organization for Economic Cooperation and Development. 1991. Computer and Dynamo: The Modern Productivity Paradox in a Not-Too-Distant Mirror. In *Technology and Productivity: The Challenge for Economic Policy,* 315–47.

have generated demand for credit that is supplied, in part, by banks and thrifts. Perhaps most important, the recent large-scale industrial restructuring has been highly supportive of strong business credit quality. This process has moved economic resources to more productive uses in an orderly fashion, without the high levels of bankruptcies and defaults that often accompany industrial restructuring. Given the volumes of corporate assets that have changed hands in recent years (more than $1.4 trillion in 1999 alone), it is fortunate indeed that this restructuring has proceeded in this fashion.

The Role of the Capital Markets

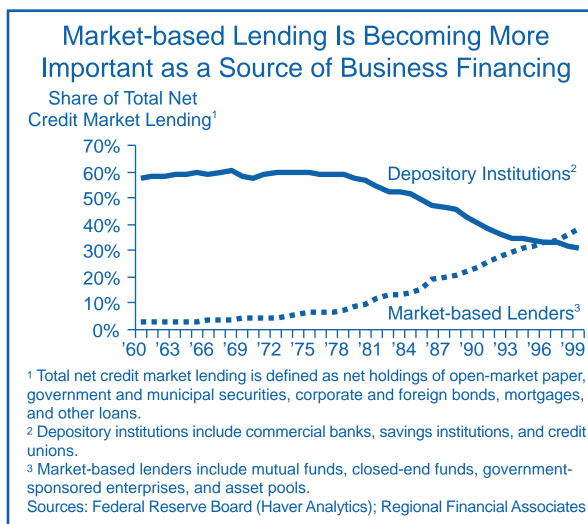
A critical factor in heightened business investment and restructuring during this expansion has been the remarkably favorable conditions in the financial markets. Financial capital has generally been readily available to business borrowers, usually on favorable terms. One factor that has held down the cost of capital for publicly traded corporations has been sharply rising stock prices. Many of these firms have been able to use equity shares as a currency with which to finance mergers. Furthermore, existing accounting rules do not always require the amortization of good will that comes onto the balance sheet as a result of a merger.[11]

By far the largest amount of external business financing has been debt financing. U.S. nonfinancial corporations issued net debt in the amount of $535 billion in 1999 and repurchased equity shares, on net, for the sixth consecutive year. Businesses have used this debt to purchase capital equipment, finance mergers, and buy back equity shares. This increase in debt issuance has not been limited to highly rated corporations. Venture capital financing amounted to almost $15 billion in the fourth quarter of 1999 alone, with over 60 percent of that amount going to Internet firms.[12]

Banks have been active participants in nearly every facet of this financing activity. Syndicated loan origination volumes rose by 17 percent in 1999 to just over $1 trillion, despite relatively high credit costs and facility fees, factors that helped keep total volume below 1997's record $1.1 trillion in issuance. Syndicated loans to leveraged companies also rose 17 percent in 1999 to a record $320 billion. More impressive still was the growth in high-yield transactions, which rose nearly 50 percent in 1999 to $190 billion. It is difficult to determine precisely how much syndicated loan exposure resides on the books of insured institutions or, more important, how much high-yield exposure is retained by commercial banks. ***Loan Pricing Corporation*** estimates that 64 percent of high-yield volume in the first half of 1999 was retained by banks.[13] Insured commercial banks are the dominant originators of syndicated loans, with a 79 percent market share of investment-grade originations and a 56 percent market share of non-investment-grade originations in 1999. Commercial banks have also expanded their presence in the venture capital market. For some of the largest banks, profits from venture capital operations account for a large portion of total earnings. Chase Manhattan reported venture capital investment earnings of $2.3 billion in 1999, accounting for 22 percent of total net income.[14]

Innovation in the capital markets continues to provide new and more efficient vehicles for business financing. For example, issuance of asset-backed securities totaled $346 billion in 1999, up from only $50 billion in 1990. In this ongoing revolution in finance, market-based intermediaries, such as mutual funds and asset pools, have assumed an increasing role in the credit markets. Chart 4 shows that net holdings of credit market instruments by mutual funds, government-sponsored enterprises, and asset pools exceeded the debt held by depository institutions for the first time in 1997.

CHART 4



[1] Total net credit market lending is defined as net holdings of open-market paper, government and municipal securities, corporate and foreign bonds, mortgages, and other loans.
[2] Depository institutions include commercial banks, savings institutions, and credit unions.
[3] Market-based lenders include mutual funds, closed-end funds, government-sponsored enterprises, and asset pools.
Sources: Federal Reserve Board (Haver Analytics); Regional Financial Associates

[11] April 17, 2000. Techdom's New Bean-Counting Battle. *Business Week.*

[12] May 2000. Venture financing data are derived from a PriceWaterhouseCoopers/Money Tree survey, as cited in *Upside,* 43.

[13] September 13, 1999. Junk Loan Market Is Feeling the Pinch of Oversupply and Rising Interest Rates. *The Wall Street Journal.*

[14] April 3, 2000.What's Really Driving Banks' Profits. *Business Week.*

While the expansion in market-based financing has made credit more available to business and consumer borrowers, it also creates some concerns. One issue is the susceptibility of the financial markets to periodic bouts of turmoil. These episodes, such as the one triggered by the Russian government bond default and the near-failure of the Long Term Capital Management hedge fund in the fall of 1998, can result in the interruption of capital flows even to creditworthy borrowers. During the 1998 episode, private yield spreads widened sharply as investors sought the safety of U.S. Treasury securities. Some companies that had planned to issue debt to the markets during that period were unable to do so. For companies whose business models depend heavily on a continuous supply of liquidity from the financial markets, the effects of these episodes can be catastrophic. For example, the relatively short-lived episode of financial turmoil during late 1998 resulted in significant liquidity problems for a number of commercial mortgage firms. Nomura, Lehman Brothers, CS First Boston, and others incurred losses, while Criimi Mae, Inc., was forced to declare bankruptcy.

Because market-based financing has played such a large role in facilitating the orderly restructuring of the U.S. economy through mergers and the formation of new businesses, a recurrence of financial market turmoil could contribute to the end of the current expansion. Moreover, such an event could have serious consequences for business credit quality. A prolonged interruption of market-based financing could, in this very competitive economic environment, prevent businesses from restructuring themselves through mergers and deprive them of capital needed to invest in cost-cutting technologies. The loss of financial flexibility would leave businesses much more vulnerable to the effects of competition and could result in more firms seeking bankruptcy protection. Such a scenario has the potential to bring about a significant increase in charge-off rates for business lenders.

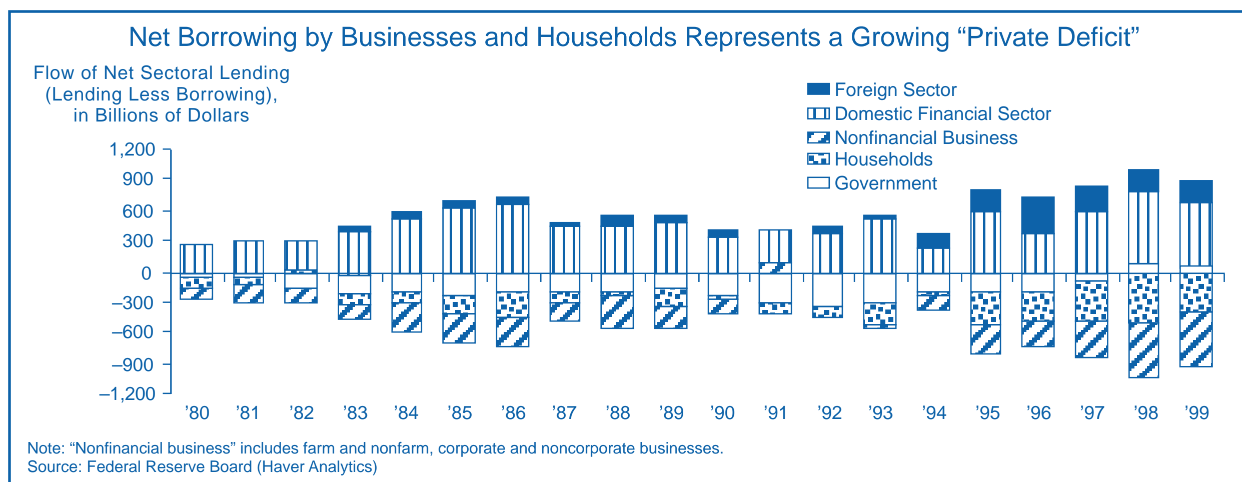
Financial Imbalances

Another concern that arises from increased dependence on market-based financing is that it may contribute to the emergence of financial imbalances in the economy. These imbalances could, in turn, increase the potential for financial market turmoil as a result of some unforeseen shock to the markets.

As recently as 1993, the public deficit was near the top of the list of economists' concerns about the U.S. economy. During that year, the combined deficit of the federal, state, and local government sectors exceeded $300 billion. However, on the strength of a long economic expansion, lower interest rates, and lower federal spending on defense, the consolidated government sector posted its second consecutive surplus in 1999 (Chart 5).

As the government has moved from deficit to surplus, households and businesses have continued to borrow hundreds of billions of dollars every year. Taken together, the annual net borrowing of businesses and households has been referred to as the "private deficit." In 1999, the private deficit narrowed to $913 billion from a record $1.02 trillion the year before. Although this private borrowing indicates confidence on the part of consumers and businesses about future prospects, it also raises concerns about the ability to service debt if interest costs rise or if incomes level off or decline.

CHART 5



Note: "Nonfinancial business" includes farm and nonfarm, corporate and noncorporate businesses.
Source: Federal Reserve Board (Haver Analytics)

The largest part of the private deficit was again financed in 1999 by domestic financial institutions ($649 billion) and an inflow of capital from abroad ($207 billion). Both of these sources of financing are potential causes for concern. The rapid expansion in credit created by the financial sector raises questions about credit quality. Financial institutions theoretically serve as the gatekeepers of the economy, financing only the most creditworthy projects and rejecting those that are not viable. The sheer volume of credit extended to businesses and households—almost $1.4 trillion in new net lending over the past two years—raises the possibility that underwriting has become more lax and that average credit quality is slipping. (See the inset box on page 17 for a discussion of recent trends in commercial credit quality.)

Reliance on inflows of foreign capital raises a different set of issues. The fact that the U.S. economy has been growing significantly faster than the economies of its major trading partners has contributed to a U.S. trade deficit that reached $268 billion in 1999 and could exceed $300 billion in 2000. This deficit puts hundreds of billions of dollars annually in the hands of foreign investors. As long as foreign investors largely choose to reinvest their excess dollars in U.S. factories and financial instruments, as has been the case in recent years, the United States can continue to enjoy a strong dollar and relatively low inflation and low interest rates. However, if foreign investors should choose to invest elsewhere, they must sell their dollars in foreign exchange markets. Doing so would put downward pressure on the dollar and upward pressure on U.S. inflation and interest rates.

Recent Shocks to the U.S. Economy

Despite the potential for a declining dollar as a result of U.S. reliance on foreign capital, other adverse developments have confronted the U.S. economy over the past year. The two factors of most consequence to the macroeconomic outlook have been rising energy costs and rising interest rates. These trends have played a role in recent equity market volatility that may have implications for the future direction of the economy.

Rising Energy Prices. After declining to a low of around $10 per barrel in December 1998, oil prices have risen dramatically over the past year and a half. The spot price per barrel of West Texas Intermediate crude peaked in March 2000 at just under $30 before declining slightly in April. The rapid increase in oil prices during 1999 was sparked by a cutback in output by oil-producing nations that was instituted just as global economic growth was recovering from the crisis of 1998. The OPEC nations and other major oil producers reached a new agreement in March 2000 that provides for a production increase of some 1.5 million barrels a day. But, because demand is rising and gasoline inventories remain lean, analysts do not look for a significant decline in gasoline prices in the near term.[15]

The effects of higher oil prices on the U.S. economy at this time are uncertain. According to some estimates, the economy is only half as dependent on oil as it was 25 years ago, when the United States was experiencing the effects of its first "oil shock."[16] Still, higher oil prices were responsible for nearly all the increase in consumer price inflation during 1999. While year-over-year growth in the Consumer Price Index rose from 1.6 percent in December 1998 to 2.7 percent in December 1999, the core rate of inflation (excluding food and energy items) actually fell. The question now is whether higher energy prices will be passed along to the rest of the economy through rising wage and price demands during the remainder of 2000.

Rising Interest Rates. From low points at the end of 1998, both short-term and long-term interest rates have risen substantially, contributing to a higher cost of debt service for businesses and households. At the short end of the yield curve, the Federal Reserve (the Fed) raised the Federal Funds rate six times between June 1999 and May 2000, for a total increase of 175 basis points. While part of this increase merely reversed the reduction in rates that took place in late 1998, the Fed also voiced concerns that inflationary pressures might be emerging because of continued rapid U.S. economic growth. Given the stated commitment of the Federal Reserve to price stability, most analysts expect the Fed to continue to push short-term rates higher until growth in the economy slows to a more sustainable pace.[17]

Bond markets also pushed up long-term interest rates during this period. The yield on the ten-year Treasury

[15] Energy Information Agency (U.S. Department of Energy). April 2000. Short-Term Energy Outlook. http://www.eia.doe.gov/emeu/steo/pub/contents.html.

[16] March 11, 2000. Fueling Inflation? *The Economist.*

[17] See, for example, U.S. House of Representatives. February 17, 2000. Testimony of Chairman Alan Greenspan Before the Committee on Banking and Financial Services. http://www.federalreserve.gov/boarddocs/hh/2000/February/Testimony.htm.

As Commercial Credit Quality Indicators Slip, Trends in Commercial Lending Come to the Forefront

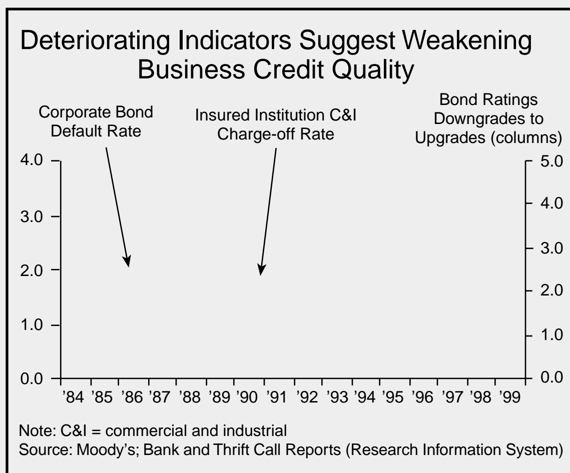
Commercial lending, which includes both commercial and industrial (C&I) and commercial real estate (CRE) loans, represents the greatest source of credit risk to insured institutions and the deposit insurance funds. C&I loan growth continued to be strong in 1999, although it did moderate from 1998 levels, and recent underwriting surveys have reported a slight tightening of terms.[18] Nevertheless, there are signs that commercial credit quality is deteriorating.[19] Most notably, as seen in Chart 6, C&I loan charge-off rates, corporate bond defaults, and corporate bond rating downgrades relative to upgrades have all been trending upward recently. For example, C&I loan loss rates rose to 0.56 percent of total loans in 1999, nearly double the rate of loss experienced in 1997. Although C&I loan loss levels are well below historical highs experienced throughout the 1980s and early 1990s, these signs of credit quality deterioration are occurring despite extremely favorable economic conditions.

At least three factors have contributed to weakening in corporate credit quality. First, corporate indebtedness has been rising, as businesses have been spending to increase productivity, cut costs, repurchase equity, and finance mergers and acquisitions. The second factor relates to a greater risk appetite in the financial markets. For example, originations of leveraged syndicated loans—in particular, highly leveraged loans—have tripled over the past five years. Finally, stresses within industry sectors hard hit by structural changes, global competition, and deflationary pressures have resulted in challenges for borrowers.

Construction and development (C&D) lending continues to be one of the fastest growing segments of banks' loan portfolios, while loss rates among CRE and C&D loans remain extremely low. However, there are indications that conditions could be worsening in some markets. In particular, as shown in Chart 7, strong office completions and construction activity have begun to outpace absorptions and are projected to continue to do so over the next several years. Moreover, these trends have implications for vacancy rates. The national office vacancy rate moved higher during 1999 for the first time since 1991 and is projected to climb higher.

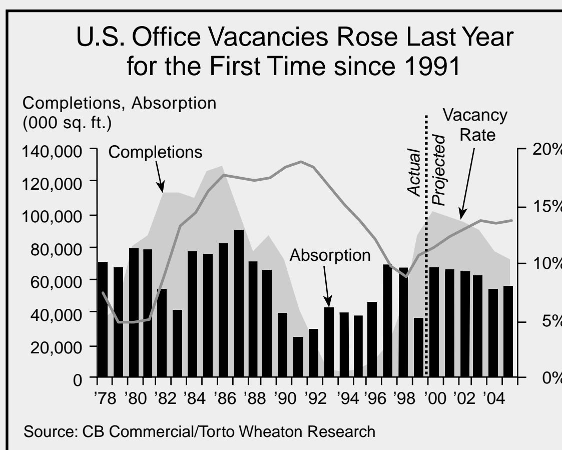
In addition, some local CRE markets continue to show signs of overbuilding. Last year, the FDIC's Division of Insurance identified nine markets in which the pace of construction activity threatened to outstrip demand for at least two property sectors.[20] Seven of these nine markets reported an increase in office vacancy rates in 1999.

CHART 6



Note: C&I = commercial and industrial
Source: Moody's; Bank and Thrift Call Reports (Research Information System)

CHART 7



Source: CB Commercial/Torto Wheaton Research

[18] Both the 1999 *Senior Loan Officer Opinion Survey* (Federal Reserve Board) and 1999 *Survey of Credit Underwriting Practices* (Office of the Comptroller of the Currency) point to more stringent C&I loan terms since the latter part of 1998. This tightening follows a four-year period of easing C&I loan standards and predominantly reflects an increase in loan pricing.

[19] For additional detail, see Sothoron, Arlinda, and Alan Deaton. FDIC Division of Insurance. First quarter 2000. Recent Trends Raise Concerns about the Future of Business Credit Quality. *Regional Outlook.* http://www.fdic.gov/bank/analytical/regional/ro20001q/na/Infocus1.html.

[20] These markets are Charlotte, Orlando, Salt Lake City, Dallas, Las Vegas, Phoenix, Nashville, Atlanta, and Portland. See Burton, Steve. FDIC Division of Insurance. First quarter 1999. Commercial Development Still Hot in Many Major Markets, But Slower Growth May Be Ahead. *Regional Outlook.* http://www.fdic.gov/bank/analytical/regional/ro19991/na/Infocus2.html.

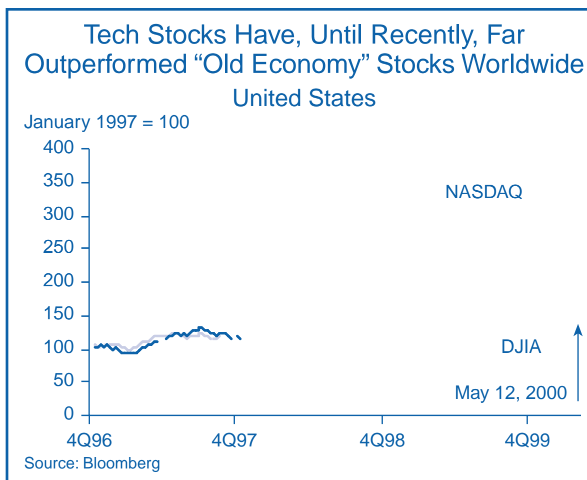
note rose from a low of 4.5 percent in October 1998 to 6.5 percent by May 2000. Analysts have cited renewed demand for credit by a recovering world economy as well as concerns about inflation arising from the increase in energy prices as factors behind the rise in long-term rates.

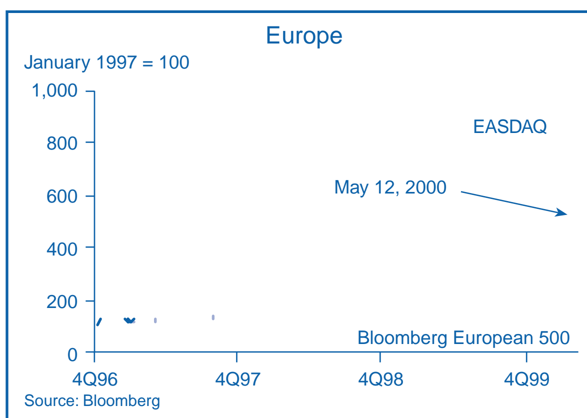
Higher energy costs and higher interest rates do not appear to have significantly slowed the pace of U.S. economic activity during the first quarter of 2000. The preliminary estimate of real gross domestic product growth during the quarter was 5.4 percent—a slowdown from the 7.3 percent rate of the fourth quarter of 1999 but still well above what is considered a sustainable pace. Home construction, usually a sector that is particularly sensitive to movements in long-term interest rates, has remained surprisingly resilient. Still confident of their future prospects, homebuyers have increasingly turned to adjustable-rate mortgages to avoid some of the immediate costs of higher fixed mortgage rates.

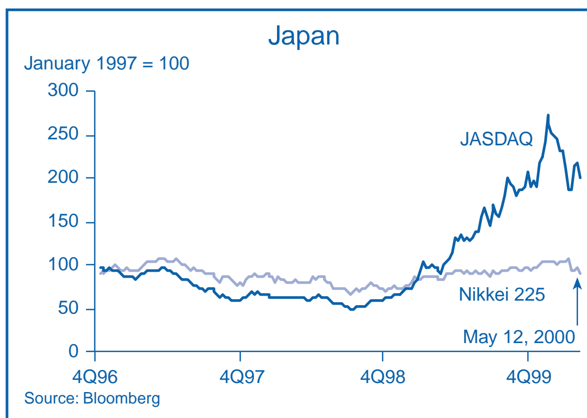
As for the business sector, higher costs for energy and debt service are most significantly affecting "Old Economy" firms that purchase commodity inputs and carry significant debt on their balance sheets. Airline companies in the S&P 500, for example, posted a year-over-year decline of 27 percent in net income from continuing operations during the first quarter of 2000.[21] Analysts have argued that New Economy firms, by contrast, are less vulnerable to recent economic shocks because they tend to carry little debt and consume relatively little energy.

Equity Market Volatility. The notion that New Economy firms are less vulnerable to the effects of higher energy costs and higher interest rates may be one of the reasons that equity shares of firms in the technology sector began to dramatically outperform the broader market, beginning around the middle of 1999. Chart 8 shows that the technology-heavy NASDAQ index performed more or less in tandem with the Dow Jones Industrial Average between the end of 1996 and the middle of 1999, but thereafter the NASDAQ soared far ahead of the Dow. Between October 1, 1999, and February 29, 2000, the NASDAQ rose by 72 percent while the Dow declined by 4 percent. Moreover, this striking divergence between the equity returns of Old and New Economy companies was not limited to the U.S. markets. Parallel trends were observed in Europe, Japan, Korea,

CHART 8







and Hong Kong. The similarity in performance of the high-tech sectors across three continents suggests a worldwide flow of liquidity from investors to the shares of technology firms.

However, emerging concerns about the technology sector contributed to significant volatility in technology

[21] Bloomberg. The S&P 500 airline industry is composed of AMR Corp., Delta Air Lines, Southwest Airlines, and U.S. Airways Group.

shares during March and April 2000. The NASDAQ index lost 30 percent of its value between March 10 and May 12, 2000. Analysts cited the Justice Department finding against Microsoft and doubts about the ultimate profitability of business-to-consumer Internet firms as two factors in the sell-off.

Equity market volatility also poses a threat to the economic outlook. One concern is the so-called "wealth effect" that a declining stock market may have on consumer spending. Since 1995, rising stock prices have helped raise the market value of equities held by U.S. households, plus their holdings of mutual funds, by some $5.7 trillion. This windfall is an important reason that households have continued to reduce annual personal savings (to just 2.4 percent of disposable income in 1999) and increase spending on homes, autos, and other consumer goods. Although it is uncertain what effect a prolonged stock market correction might have on consumer spending, the potential wealth effect has surely grown as more households hold a higher percentage of wealth in corporate equities and mutual fund shares. (See the inset box at right for a discussion of how financial market volatility could affect banks.)

The Economic Outlook

Despite the effects of rising energy costs, increasing interest rates, and equity market volatility, the U.S. economy continues to grow at a robust pace. The consensus forecast of 50 corporate economists surveyed by the May 1999 ***Blue Chip Economic Indicators*** suggests that the economy will grow by 4.7 percent in 2000, while consumer prices are projected to rise by 3.0 percent from 1999 levels. Short-term interest rates are projected to rise only slightly by year-end from early May levels. In short, the consensus forecast indicates that the New Economy formula of rapid economic growth combined with low inflation will continue for the foreseeable future. If actual events conform to this forecast, the result will likely be another year of generally low loan losses and solid earnings for much of the banking industry. (See the inset box on the following page for a discussion of other risks to watch in banking.)

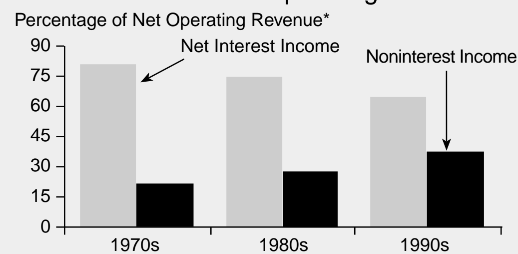
Clearly, risks are associated with the economic outlook. Recently, higher oil prices and higher interest rates have been the most visible signs of trouble for the economy. New Economy companies may be less vulnerable to these effects, but even these firms have experienced a sharp decrease in equity valuations as investors reeval-

Financial Market Volatility Could Pare Earnings for Banks Most Reliant on Market Sources of Revenue

FDIC-insured banks are deriving an increasing proportion of earnings from noninterest sources (see Chart 9), particularly market-sensitive sources of revenue. This is especially true for larger institutions. According to ***Deutsche Banc Alex. Brown,*** the 18 most active generators of market-sensitive sources of revenue earned over 25 percent of net operating revenue from these potentially volatile business lines.[22] While market-sensitive sources help to diversify revenue streams, they can also introduce increased income volatility in the event of financial market turbulence. Deutsche Banc Alex. Brown also reports that for those 18 banks that generated the largest amounts of market-sensitive revenues during the third quarter of 1998, the share of total revenue derived from market-sensitive sources declined from 23 percent to 13 percent. Thus, a more sustained downward trend in the financial markets could particularly affect the earnings of large banking companies that rely heavily on income from sources such as venture capital, asset management and brokerage services, and investment banking.

CHART 9

Noninterest Revenues Account for a Growing Share of Bank Net Operating Revenue



* Net operating revenue is the sum of net interest income and noninterest income.
Sources: FDIC Historical Statistics on Banking; FDIC Quarterly Banking Profile

[22] Net operating revenue is the sum of interest income and noninterest income less interest expense. According to Deutsche Banc Alex. Brown, these companies are Bank of America Corporation; Bank of New York Company, Inc.; Bank One Corporation; Bank Boston; BB&T Corporation; Chase Manhattan Corporation; Citigroup, Inc.; First Union Corporation; FleetBoston Financial; JP Morgan; KeyCorp; Mellon Financial Corporation; National City Corporation; PNC Bank Corp.; SunTrust Banks, Inc.; US Bancorp; Wachovia Corporation; and Wells Fargo & Company.

Other Risks to Watch in Banking

Subprime Lending

- ***Subprime consumer loan portfolios contributed to the large losses associated with recent high-cost bank failures.*** During 1999, the FDIC reported the first annual loss for the Bank Insurance Fund since 1991. The loss was primarily the result of an uptick in unanticipated and high-cost bank failures. FDIC-insured institutions with at least 20 percent of Tier 1 capital in subprime loans accounted for 6 of the 13 bank failures that occurred between January 1998 and March 2000. Fraud and inappropriate accounting for residuals also played a role in some of these failures.[23]

- ***Subprime lending remains an area of concern.*** Insured depository institutions that engage in subprime lending represent a disproportionate share of problem institutions. Of the 79 banks and thrifts on the problem bank list as of year-end 1999, 21 percent were institutions with at least 20 percent of their Tier 1 capital in subprime loans.[24]

Agricultural Lending

- ***While a majority of agricultural institutions remain relatively strong, external conditions have put pressure on some agricultural producers***. Many agricultural areas are experiencing low commodity prices as well as weather- and disease-related problems. Strong global competition and high worldwide production over the past several years have resulted in increasing inventories of many crops and poor prospects for a price turnaround in the near term. Moreover, in spite of record government farm payments in 1999, the U.S. Department of Agriculture projects that in the year 2000 one in four farms will not cover cash expenses, up to 20 percent of farmers will experience repayment problems, and 5 percent of farmers will be "vulnerable."[25]

- ***Some signs point to growing stress for agricultural institutions.*** Forty-two percent of FDIC-supervised banks active in agricultural lending showed a moderate or sharp increase in the level of carryover debt during third quarter 1999, compared with just 26 percent during third quarter 1998.[26] In addition, net loan loss rates for agricultural production loans increased in 1999 to the highest level since 1991. However, at 0.32 percent, the 1999 net loss rate is just one-tenth the rate experienced during the height of the agricultural crisis of the mid-1980s.[27]

Operational Risk

- ***Operational risks are becoming more prominent in the banking industry.*** Driven by consolidation and expansion into new product lines and markets, financial institutions are seeing an increase in operational complexity. Operational risk encompasses a host of factors not related to credit or market activities, including risks associated with processing transactions, legal liability, fraud, strategic missteps, and internal control weaknesses. Operational risks tend to be more pronounced when institutions engage in rapid growth, far-flung operations, and complex business processes.

- ***Greater attention is being paid to operational risks in the financial industry***. Recently, analysts have noted that the pressure to meet ambitious postmerger earnings predictions can result in cost-cutting measures that jeopardize the comprehensiveness and integrity of risk-management systems. In addition, the role that fraud has played in recent bank problems and failures reinforces the importance of adequate internal controls and audit procedures. The significance of operational risks to financial institutions has been noted in industry surveys and information-sharing efforts among financial firms.[28] NetRisk Inc., a Greenwich, Connecticut, consulting firm, recently estimated that operational losses among financial institutions have exceeded $40 billion over the past five years.

[23] See Puwalski, Allen. FDIC Division of Insurance. Second quarter 1998. Gain-on-Sale Accounting Can Result in Unstable Capital Ratios and Volatile Earnings. *Regional Outlook.* http://fdic01/division/doi/outlook/2q1998/atlanta/infocus1.html.

[24] The problem bank list includes all insured depository institutions rated a composite "4" or "5."

[25] "Vulnerable," as defined by the U.S. Department of Agriculture Economic Research Service, applies to institutions that have debt/asset ratios above 0.40 and negative income such that they cannot meet current expenses or reduce existing indebtedness.

[26] September 1999. *FDIC Report on Underwriting Practices*.

[27] See Anderlik, John M., and Jeffrey W. Walser. FDIC Division of Insurance. Third quarter 1999. Agricultural Sector Under Stress: The 1980s and Today. *Regional Outlook.* http://www.fdic.gov/bank/analytical/regional/ro19993q/kc/agricult.html.

[28] For additional detail, see March 2000. Operational Risk: The Next Frontier. *RMA/PricewaterhouseCoopers Survey.* April 6, 2000. Tech Bytes: Banks Join Forces Against Operational Risk. *American Banker.*

uate the long-term prospects. Equity market volatility threatens to dampen consumer confidence and the ability of businesses to continue to merge, restructure, and invest.

The economy has become particularly dependent on financing delivered through the capital markets. In this more permissive financial environment, rising debt levels and greater dependence on foreign capital have emerged as financial imbalances that may contribute to future problems for the economy. Businesses and households with high levels of debt are more vulnerable to problems if interest rates continue to rise or income growth falters. Rapid credit creation by the domestic financial sector suggests the possibility of lax credit underwriting standards. Reliance on foreign capital raises concerns about what would happen to the value of the dollar and to domestic inflation if foreign investors decide to invest elsewhere.

Some analysts suggest that the New Economy, driven by increased productivity, heightened competition, and robust investment, may be characterized by longer expansions. Financial market imbalances may, however, contribute to deeper recessions and more sluggish recoveries compared with earlier business cycles.

For the banking industry, it is clear that a recession would mean slower loan growth, deteriorating credit quality, and impaired profitability. But the biggest threat to the banking industry is a recession that is tied to disruptions in the financial markets. The ready availability of financing to start new businesses and restructure old businesses has been key to the New Economy. The process by which businesses have invested and restructured in response to competition has been orderly from the perspective of bank creditors. If this process should be disrupted, we could see a much more disorderly process, with more bankruptcies and higher losses to lenders.

This article was prepared and coordinated by the management and staff of the Analysis Branch of the Division of Insurance. Contributions and feedback from analysts across the Division were essential to its completion.

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