Regional Perspectives

♦ Region’s Economic and Banking Conditions—Despite slowing national and regional economies during third-quarter 2000, the aggregate loan-to-asset ratio for banks and thrifts in the Memphis Region reached a historical high. Recent growth is concentrated in traditionally higher-risk commercial real estate and construction loans. See page 4.

♦ Memphis Area Banks Report Sharply Higher Funding Costs and Credit Exposure—Rising funding costs, particularly in the Region’s metropolitan areas, are likely pressuring banks to accept additional credit risk to bolster falling net interest margins. In areas where competitive pressures appear highest, such as in Memphis, Tennessee, banks are reporting greater increases in credit exposure. See page 6.

♦ How Do Banks Respond to Competition in a Slowing Economy?—If loan demand softens with slowing economic conditions, banks in many highly competitive markets likely will face difficult strategic decisions that could affect asset quality, earnings performance, or market share. See page 9.

By the Memphis Region Staff

In Focus This Quarter

♦ Credit Problems for U.S. Businesses Continue to Rise—Commercial loan quality indicators of insured banks have steadily worsened since 1998. Factors contributing to this deterioration include rising financial leverage in the corporate sector as well as weaknesses within certain domestic industries. Many market observers also have attributed the increase in problem commercial loans to a heightened appetite for risk and relaxed underwriting standards from 1996 to 1999. The apparent softening in economic conditions in recent months reduces prospects that business loan quality will improve any time soon. In the meantime, lenders, analysts, and supervisors continue to pay close attention to U.S. business lending conditions. See page 10.

♦ Outlook for Three Industries Facing Uncertainty—Industries as diverse as telecommunications, health care, and textiles have been experiencing problems, despite the economic expansion that began nine years ago. Although the sources of their difficulties are quite different, these industries share some common concerns and challenges. Fierce competition characterizes their operating environment. Armed with a better grasp of the origins of stress in these industries, we will have a better basis for understanding the lending risks associated with a changing policy and economic environment in the years to come. See page 18.

By the Division of Insurance Staff
The **Regional Outlook** is published quarterly by the Division of Insurance of the Federal Deposit Insurance Corporation as an information source on banking and economic issues for insured financial institutions and financial institution regulators. It is produced for the following eight geographic regions:

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To the Reader:

The goal of the Regional Outlook is to provide useful risk-related information to bankers, banking agency staff, and other interested readers. To do this more effectively, the second quarter 2001 edition will have a new look. We will publish a single national edition that will provide an overview of economic and banking risks and discussions of these risks as they relate to insured institutions in each FDIC Region. We will tell the national story and, at the same time, alert the reader to specific trends and developments at the regional level.

After considering our experience with this new format, we may adopt it permanently for the second and fourth quarters of each year. The first and third quarter editions will continue to feature in-depth coverage of the economy and banking industry in each Region. Trying new formats will help us find the right balance between regional coverage of specific topics and analysis of economic and banking issues that cut across regional lines.

After you have read the next edition of the Regional Outlook, we would like to hear from you. Does this new approach provide a more effective vehicle for reporting on banking and economic trends? What other suggestions do you have for improving our presentation of risk-related information? Call us with your comments at (877) 275-3342 or (800) 925-4618 (TDD) or e-mail them to lnejezchleb@fdic.gov.

Sincerely,

George E. French
Executive Editor
Growing Competition Contributes to Higher-Risk Selections in Certain Markets

- Although growth in the U.S. and Memphis Region economies slowed appreciably in third quarter 2000, concentrations in higher-yielding and traditionally higher-risk loan categories among the Region’s insured institutions continued to increase.

- Banks headquartered in many of the Region’s metropolitan areas reported the most significant increases in credit exposure, likely in response to competitive pressures affecting net interest margins.

- Within the Region, competitive pressures and increases in credit exposure appear to be greatest in the Memphis metropolitan area.

Region’s Economic and Banking Conditions

The article “Late Cycle Behavior: Earnings Pressures Lead to Increased Credit Risk” (Regional Outlook, fourth quarter 2000) described how many insured institutions have responded to escalating funding costs by accepting greater credit exposure to maintain asset yields. This trend is most pronounced in many of the Region’s metropolitan areas; banks in markets reporting the greatest increases in funding costs also generally report more significant increases in credit exposure. Banks’ continued ability to respond to competitive pressures in this way, however, may be limited by slowing economic conditions.

The Economy Is Slowing

As the nation’s economic expansion reaches a historic ten-year anniversary, there are indications of weakening. The nation’s gross domestic product, the sum of all goods and services produced, continued to grow, but at a substantially slower rate than in prior periods.\(^1\) Economic indicators in the second half of 2000 also revealed a slowdown in consumer spending/retail sales and a steep decline in building starts and business investment compared with the previously rapid pace. In response, the Federal Reserve Board cut interest rates in January 2001.

The Memphis Region experienced moderating economic growth consistent with that of the nation in third quarter 2000. Sluggish sales and growing inventories of durable goods, particularly in the automobile industry,\(^2\) led to some temporary plant closures and layoffs. With weakness in the manufacturing sector affecting many rural areas and tight labor markets constraining growth in urban areas, the Region’s employment growth trailed the nation’s during third quarter 2000 for the eighth consecutive quarter.\(^3\)

Within the Region, economic growth during this expansion has been concentrated in metropolitan areas (see Chart 1), which have benefited from strength in the services, retail, transportation, and public utility sectors. Conversely, rural area growth has been hindered by weakness in agriculture and declining non-durable manufacturing jobs, notably apparels and textiles.

Bank Credit Exposure Continues to Grow

Despite the slowdown in the national and regional economies during third quarter 2000, banks and thrifts in the Memphis Region reported increasing credit exposure, with insured institutions’ aggregate loan-to-asset (LTA) ratio reaching a historical high. Banks and thrifts have appeared willing to accept greater levels of credit risk by increasing relative loan volume in traditionally higher-risk loans in order to improve asset yields and maintain net interest margins (NIMs) pressured by rising

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\(^{1}\) Real gross domestic product grew at a 2.2 percent annual rate in third quarter 2000, compared with a 5.7 percent annual rate in the same period in 1999.

\(^{2}\) The potential slowdown in the automobile industry and likely effects on the Mid-South initially were discussed in the Regional Outlook, third quarter 2000.

\(^{3}\) Payroll employment growth in the Memphis Region in third quarter 2000 was 1.2 percent, compared with 2.0 percent nationally.
The relocation of established banks into metropolitan markets also has contributed to increased competition. Rural-based banks, as well as banks located in other metropolitan markets, likely have decided to enter the most economically vibrant markets.

The growing presence of nonbank financial service providers also increases competition for community banks in the Memphis Region’s metropolitan markets. Credit unions, finance companies, brokerage firms, mortgage lenders, and business-affiliated financing arrangements are examples of nonbank competitors. Competition from these and other sources may intensify as the enactment of the Gramm-Leach Bliley Act of 1999 promotes the entry of new participants into the banking arena.

In response to higher funding costs, many insured institutions operating in the Region’s metropolitan areas have tapped into relatively strong loan demand to maintain NIMs. Banks in the Region’s metropolitan areas reported higher LTA ratios than did banks headquartered in rural areas, although the variance between metropolitan and rural areas nationally is minimal. Furthermore, although insured institutions operating in the Region’s metropolitan areas historically have reported LTA ratios well below national levels, recent loan growth has reversed this trend, and regional levels are now higher than national levels.

Several factors are contributing to rising competition in metropolitan markets:

- New bank formation is a significant source of increasing competition among banks in metropolitan areas. While only one-third of the Region’s insured institutions are headquartered in metropolitan areas, 60 percent of banks established since the last recession are located in urban areas.

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In specific metropolitan areas, insured institutions report even greater changes in funding costs and more dramatic shifts in asset composition.

**Memphis Area Banks Report Sharply Higher Funding Costs and Credit Exposure**

Within the Region, community banks headquartered in the Memphis metropolitan area have reported the greatest increase in competitive pressures in recent years, using relative funding costs as an indicator of competition (see inset box). In 1997, Memphis-area banks reported an aggregate cost of funds well below the median reported for all metropolitan markets nationally. Since that time, however, relative funding costs have risen sharply (see Table 1), suggesting a significant increase in competition. The relative cost of funds for insured institutions headquartered in Memphis climbed dramatically to the 96th percentile; in other words, aggregate funding costs for banks in the Memphis market are higher than costs for banks in 96 percent of metropolitan areas nationally.

The city experienced rapid economic growth in the first six years of the current expansion, benefiting from strength in the services, retail, and transportation sectors. This growth in turn led to a boom in construction activity, further fueling economic growth. More recently, however, tight labor markets and weakness in the manufacturing sector has contributed to slowing employment growth. As a result, commercial and resi-

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**Relative Cost of Funds Analysis**

The methodology used in this article to determine relative funding costs for metropolitan markets creates a subset of relatively similar banks in each market that serves as a proxy for insured institutions operating in that market. The analysis requires a static sample of relatively similar banks over time to ensure that variations in funding costs were related to changing market conditions rather than differences in the composition of institutions operating in each market.

From all insured institutions headquartered in metropolitan areas nationwide, the following institutions were excluded from the analysis:

- **Large banks**—defined as all banks with $1 billion or more in total assets. Large banks typically operate in multiple markets. Also, they have greater access to alternative funding sources, which would likely influence overall funding costs and limit comparability between large and other institutions.

- Thrift institutions—includes both mutual and stock savings banks and savings and loans. In many areas of the nation, thrifts are funded very differently from banks, making it more difficult to compare samples that include thrifts.

- **Credit card lenders**—defined as institutions with 50 percent or more of total assets in credit card receivables. Because of the high asset returns associated with the receivables and specific funding needs, credit card lenders may have a considerably higher cost of funds.

- Other specialized institutions—defined as institutions with less than $1 billion in total assets and with less than 40 percent of assets in loans. These institutions are often fee-oriented and less concerned with asset yields and funding costs.

- **New banks**—defined as banks in operation for less than three years. New banks often have low initial funding costs, as capital supports a larger share of total assets. New banks tend to pay higher rates than existing institutions in the market in order to attract deposits as they grow.

The ranking was further limited to metropolitan areas with a sample size of five or more institutions. Among the remaining markets (approximately 150 metropolitan statistical areas), relative rankings were based on an aggregate cost of funds calculation. The subsequent analysis focused on the change in relative ranking over time rather than on the absolute level at any particular time.

Although the methodology used in determining relative cost of funds rankings focused on a specific group of banks, the findings of this analysis also would apply to any other institution headquartered or operating in each market. For example, the factors influencing funding costs for the banks in the sample also would affect large banks to the extent that they were operating in that market.

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7 As measured by payroll employment and personal income growth.
**Table 1**

<table>
<thead>
<tr>
<th>Metropolitan Market</th>
<th>September '97</th>
<th>September '00</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAYETTEVILLE-SPRINGDALE, AR</td>
<td>98</td>
<td>90</td>
</tr>
<tr>
<td>LEXINGTON, KY</td>
<td>63</td>
<td>79</td>
</tr>
<tr>
<td>LITTLE ROCK, AR</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>LOUISVILLE, KY</td>
<td>79</td>
<td>82</td>
</tr>
<tr>
<td>MEMPHIS, TN</td>
<td>35</td>
<td>96</td>
</tr>
<tr>
<td>NASHVILLE, TN</td>
<td>77</td>
<td>87</td>
</tr>
</tbody>
</table>

Note: Only those regional markets currently in the top quartile of markets nationally as of September 30, 2000, are shown.

Source: Bank Call Reports


Memphis’s economic prosperity throughout much of the 1990s encouraged the formation of new insured institutions. The city experienced a greater influx of new banks than any other metropolitan area in the Region; 12 new banks have opened in Memphis since 1991. Most of this activity occurred in the late 1990s, with nine new banks opening since third quarter 1997 (a period corresponding with that used in the relative cost of funds analysis). With 30 insured institutions headquartered in the city and 43 institutions operating there as of September 30, 2000, the significant proportion of new insured institutions striving to grow market share is likely a major factor driving the increase in relative funding costs.

Community banks in the Memphis market responded to rising funding costs by focusing on asset yields and accepting higher inherent credit risk. As shown in Table 2, the aggregate LTA ratio has increased considerably in recent periods. In addition, banks appear to have participated in the robust real estate market by accepting higher concentrations in CRE loans.

Capital levels for Memphis-area banks included in the analysis have declined substantially with the shifts in balance sheet composition described above. For example, the aggregate Tier 1 risk-based capital ratio for Memphis-area banks declined from 19.0 percent three years ago to 12.3 percent at the end of third quarter 2000. The calculation for the risk-based capital ratio assigns varying weightings to broad asset classes based on an associated level of risk for each asset. For example, loans generally receive a higher risk weighting than securities, and, within the loan portfolio, CRE loans receive a higher risk weighting than residential real estate loans. Therefore, both the migration to loans and the shift to traditionally higher-risk loan types have affected risk-based capital ratios.

Increasing leverage also has affected capital ratios. The aggregate Tier 1 leverage ratio, a calculation of capital to assets without any risk weightings assigned, also has fallen in recent years (see Table 2) as asset growth has outpaced capital retention. While capital ratios at Memphis-area banks remain well above regulatory minimums and are in line with ratios reported by banks in other metropolitan areas, the recent decline is not consistent with the increased risk suggested by the changes in loan portfolio emphasis and composition.

**Table 2**

<table>
<thead>
<tr>
<th>Memphis Banks Maintain Margins by Accepting Higher Credit Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>NET INTEREST MARGIN</td>
</tr>
<tr>
<td>LOAN-TO-ASSET RATIO</td>
</tr>
<tr>
<td>CRE/ASSETS</td>
</tr>
<tr>
<td>TIER 1 LEVERAGE RATIO</td>
</tr>
</tbody>
</table>

Note: CRE = commercial real estate

Includes only those banks with less than $1 billion in total assets that have been in operation for three years or longer and with 40 percent or more of assets in loans.

Source: Bank Call Reports

Memphis Regional Outlook 7 First Quarter 2001
By accepting higher credit exposure and increasing asset yields, Memphis-area banks largely were able to maintain NIMs. Aggregate NIMs have fallen only 5 basis points during the past three years despite the sharp rise in relative funding costs. This small drop compares favorably with the greater declines in NIMs reported for similar insured institutions in other metropolitan areas in the Region (see Table 3).

Other Area Markets Respond to Competition

Insured institutions in other metropolitan statistical areas (MSAs) in the Region that face high or rising relative funding costs have tended to follow a similar strategy of accepting additional credit exposure and boosting asset yields, as shown in Table 3. Insured institutions in these other markets generally have increased loan levels or migrated into traditionally higher-risk CRE loans, although at lower rates than banks in the Memphis market. Little Rock-area banks, discussed at the end of this section, are a notable exception.

Lexington is one of the fastest-growing metropolitan areas in the Region and reported the lowest unemployment rate (1.9 percent) of all Memphis Region MSAs in third quarter 2000. Strong local economic conditions have provided area banks an opportunity to substantially increase LTA ratios, which had grown to 73.9 percent of total assets at the end of third quarter 2000. The increase in relative funding costs for banks in the area (Table 2) likely has been driven in part by the opening of four new banks in the past three years.

Table 3

<table>
<thead>
<tr>
<th>Markets</th>
<th>Funding Costs/ Earning Assets</th>
<th>Loans/Assets</th>
<th>CRE/Assets</th>
<th>NIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEXINGTON</td>
<td>32</td>
<td>640</td>
<td>340</td>
<td>-21</td>
</tr>
<tr>
<td>LITTLE ROCK</td>
<td>45</td>
<td>290</td>
<td>290</td>
<td>-68</td>
</tr>
<tr>
<td>LOUISVILLE</td>
<td>27</td>
<td>90</td>
<td>590</td>
<td>-26</td>
</tr>
<tr>
<td>MEMPHIS</td>
<td>92</td>
<td>720</td>
<td>820</td>
<td>-5</td>
</tr>
<tr>
<td>NASHVILLE</td>
<td>42</td>
<td>260</td>
<td>400</td>
<td>-27</td>
</tr>
<tr>
<td>ALL OTHER</td>
<td>32</td>
<td>520</td>
<td>460</td>
<td>-18</td>
</tr>
</tbody>
</table>

Notes: CRE = commercial real estate; NIM = net interest margin
Source: Bank Call Reports

Louisville banks have not increased LTA ratios as much as the Region’s other metropolitan banks; however, credit exposure appears higher as a result of shifting portfolio composition. Area banks recently have shifted from residential loans into higher-yielding CRE loans. Although the relative cost of funds ranking for the city’s banks is high, it is up only slightly since 1997, as funding costs have increased by only 27 basis points.

With considerable economic growth in the city in recent years, Nashville is an attractive site for new bank formation; four banks have opened there in the past three years. Competition may increase in the near term, as the city has become a center for new bank activity; four new bank applications were pending as of year-end 2000. Relative funding costs may rise further, with these new insured institutions striving to grow market share as local economic conditions slow.

Banks operating in the Little Rock market also have experienced a sharp increase in relative funding costs in recent years as the city’s economic growth stimulated competition for deposits. The increased competition was not from newly established insured institutions, however, as only two new banks have opened in the market since 1991, and none have opened in the past three years. However, several banks from rural areas of the state relocated to Little Rock or opened branches in the city, pressuring interest rates paid on deposits by all insured institutions in the area.

Banks in Little Rock did not respond immediately to higher funding costs by aggressively growing loan portfolios or by shifting into higher-yielding loan types to

### Table 3

**Some Banks in the Region Respond to Higher Funding Costs with Increased Credit Exposure**

Figures represent basis point changes in each ratio from September 30, 1997, to September 30, 2000.

- **LEXINGTON**: NIM = -21
- **LITTLE ROCK**: NIM = -68
- **LOUISVILLE**: NIM = -26
- **MEMPHIS**: NIM = -5
- **NASHVILLE**: NIM = -27
- **ALL OTHER**: NIM = -18

Notes: CRE = commercial real estate; NIM = net interest margin
Source: Bank Call Reports
the extent reported by banks in other metropolitan markets. Local economic conditions undoubtedly played a part, as the city’s growth has slowed recently because of tight labor markets and weaknesses in manufacturing. Without the shift in balance sheet composition, Little Rock banks have reported a 68-basis-point plunge in NIMs over the past three years as funding costs climbed.

How Do Banks Respond to Competition in a Slowing Economy?

As discussed in detail in the Regional Outlook, fourth quarter 2000, a strategy of accepting increased credit exposure to maintain earnings increases the vulnerability of insured institutions to deterioration in economic conditions. A 1997 study of banking crises in the 1980s and early 1990s found that banks that experienced significant problems during economic downturns typically reported higher LTA ratios and CRE exposure levels than other insured institutions. Not surprisingly, higher exposure often led to increased levels of nonperforming loans and loan charge-offs as credit quality deteriorated with local economic conditions.

In recent years, many insured institutions have reported narrowing NIMs because of growing competitive pressures on funding costs and asset yields. However, in areas experiencing strong economic growth, the effects of this increased competition may have been masked somewhat at many banks by management decisions to accept increased credit exposure. In an environment of slower economic growth, the effects of intense competition on earnings in certain markets may become more apparent. If loan demand softens with slowing economic conditions, banks in these markets will likely face difficult strategic decisions that could affect asset quality, earnings performance, or market share:

- They may seek to maintain loan levels or continue to grow loans. This strategy could pressure management to relax underwriting standards and accept weaker credits.
- They may shift portfolio concentrations into lower-risk, lower-yielding assets. This strategy could constrain earnings, as NIMs would likely be compressed.
- They may choose to reduce credit exposure and use the decline in loan volumes to selectively reduce or eliminate expensive funding sources, possibly improving NIMs in the process. This strategy would require that total assets and revenues be allowed to shrink, which may be an unpalatable option to management, directors, or stockholders. In addition, this strategy may be less advantageous if the structural costs of the insured institution require a larger asset/revenue base.

In recent years, insured institutions have benefited from strong economic conditions, which have given management increased flexibility in responding to growing competition. Going forward, a slowing economy would undoubtedly make it more challenging for insured institutions to meet earnings expectations and maintain sound asset quality in light of intense industry competition.

Memphis Region Staff

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8 Year-over-year employment growth in Little Rock slowed to 0.2 percent in third quarter 2000, compared with 1.7 percent for third quarter 1999.

Credit Problems for U.S. Businesses Continue to Increase

- Commercial credit quality trends have been slipping since 1998, despite generally favorable U.S. business conditions.

- The recent economic slowdown, coupled with tighter credit conditions, points to continued deterioration in business credit quality over the coming months.

- Trends in bond defaults, syndicated lending, corporate profitability, and expected default levels reveal a number of industry sectors that pose a heightened degree of risk to lenders.

Introduction

Continuing increases in problem commercial loans have focused the spotlight on business lending conditions. On September 30, 2000, commercial banks reported the highest relative level of noncurrent commercial loans—at 1.52 percent of total commercial loans—since third quarter 1994. In fact, commercial banks have been reporting steadily higher rates of noncurrent domestic commercial loans since the second quarter of 1999. The first quarter 2000 edition of Regional Outlook identified several factors contributing to the decline in business credit quality despite the strong economic indicators then in place. These factors, which are still relevant today, include the rise in financial leverage for domestic corporations, greater investment risk appetite and looser underwriting standards from 1996 to 1999, and increasing financial stress within various industry sectors. More recently, an apparent slowdown in economic growth increases prospects for further deterioration in business credit conditions.

Large Banks Experience a Reversal in Commercial Credit Quality Trends

Through much of the 1990s, a sustained period of economic growth produced improving commercial loan credit quality indicators for insured commercial banks. This trend reversed itself in 1998, when banks began experiencing a steady rise in nonperforming and delinquent commercial loans. While the initial catalyst for this reversal was related mainly to events abroad, a slowing domestic economy has since taken center stage as the underlying driving force behind worsening commercial credit quality trends.

As of September 30, 2000, noncurrent commercial and industrial (C&I) loans held by commercial banks stood at $15.6 billion, a 46 percent increase over the previous year. Roughly 97 percent of this increase is attributable to the rise in nonaccrual and delinquent credit to U.S. domiciled borrowers. Net C&I loan loss rates are also rising. Through the first three quarters of 2000, annualized C&I loan loss rates reached 0.64 percent, up from 0.58 percent in 1999. The last time banks saw C&I loss rates this high was in 1993 (0.74 percent).

Larger banks, which have the greatest exposures to large- and middle-market corporate credits, have been hardest hit by the turnaround in business credit conditions. As shown in Chart 1, banks with over $1 billion in assets have experienced most of the recent deterioration in C&I noncurrent loan rates. Since the fourth quarter of 1997, the noncurrent C&I loan rate of large

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1 Nonaccrual loans plus loans 90 days or more delinquent.

2 Significant events that contributed to higher levels of problem foreign loans in 1998 include the collapse of Asian currency exchange rates and default by the Russian government on its sovereign debts. Some domestic industries that were highly dependent on exports (steel, for example) were also adversely affected by these events.
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banks has increased from 0.74 percent to 1.50 percent. Over the same period, noncurrent C&I loan rates at small banks were unchanged at 1.64 percent. While the increase in noncurrent loan rates at larger banks is significant, these higher rates remain well below those that preceded the 1990 to 1991 recession, when noncurrent loan rates at large banks were in the 3.40 percent to 3.60 percent range.

Much of the recent deterioration in banks’ business credit quality is attributable to the seasoning of credits underwritten during a period of relaxed lending standards. Each of the three bank supervisory agencies has recognized and warned about the potential impact of loosened loan underwriting standards in the event of a slowdown in the economy. For example, just over a year ago, the Office of the Comptroller of the Currency (OCC) issued a warning to banks about the “cumulative effect of the past four years of easing standards...” for commercial loans. The shift toward more liberal credit standards from 1996 to 1999 was fueled by various factors, including a robust economy, intense competition to originate syndicated credits, and an increased appetite for risk. During this period, a number of banks moved aggressively into non-investment-grade lending to combat narrowing interest margins and declining investment-grade yields. According to a recent Standard & Poor’s commentary, several banks have acknowledged the role of 1997 and 1998 vintage credits in producing higher levels of problem loans.3

Business Loan Performance Is Not Likely to Improve Any Time Soon

Prospects for any near-term reversal in deteriorating commercial loan trends are dimming as signs of slower economic growth and tighter credit conditions emerge. Economic indicators suggest an aging economic expansion that is losing momentum. In third quarter 2000, the U.S. economy recorded its 39th consecutive quarter of growth. However, real gross domestic product growth for the third quarter was only 2.2 percent, well below the previous quarter’s growth of 5.6 percent and below the 4.9 percent average quarterly growth rate during the past eight quarters. Corporate earnings also appear to be slowing. Annualized corporate profit growth in the third quarter slowed to 5.1 percent, down from a 15.6 percent annualized growth rate in second quarter 2000 and a 10.4 percent average growth rate over the past eight quarters.4 Corporate earnings are widely anticipated to slow even further based on the number of companies that have warned of profits falling below expectations in the fourth quarter.5

Prospects for slower economic growth prompted the Federal Reserve to lower its target for the federal funds rate (the rate charged on overnight lending) by 1/2 percentage point to 6 percent on January 3, 2000. This cut follows a 175-basis-point increase in the targeted federal funds rate since the end of June 1999. Although higher interest rates have undoubtedly raised borrowing costs for U.S. corporations, business borrowing rates—even before the Federal Reserve cut interest rates in January 2001—are well below those prevalent during much of the 1980s (see Chart 2, next page). Moreover, changes in rates have been far less volatile in the latter part of the 1990s than they were during the 1980s and early 1990s.

Tolerance for risk on the part of investors and lenders is waning. In a November 2000 survey of underwriting practices, the Federal Reserve Board noted that 44 percent of U.S. banks tightened credit terms for large- and middle-market borrowers in the past three months, the highest incidence of tightening since fourth quarter 1990. This tightening of credit terms is primarily in response to economic concerns, industry-specific problems, and a lower tolerance for risk. Banks appear to be especially apprehensive about taking on additional credit risk related to merger and acquisition financing deals, new borrowing prospects, and specific industry segments such as health care, movie theaters, and communications.6

 Tighter credit terms by banks will have the greatest impact on high-risk companies, which have fewer financing options in an environment of slumping bond and stock prices. Moreover, there appears to be a significant increase in the volume of maturing debt that could be forced into default if capital market or bank

5 These figures are taken from the U.S. Department of Commerce’s statistics on corporate profits with inventory valuation adjustments.
6 According to First Call/Thomson Financial, 505 companies released warnings that fourth quarter 2000 earnings would fall below expectations, up 96 percent from the 257 companies with negative profit warnings for fourth quarter 1999.
7 See the Federal Reserve Board’s November 2000 Senior Loan Officer Opinion Survey on Bank Lending Practices.
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**Chart 2**

Business Borrowing Rates Have Risen but Are Less Volatile than in Past Cycles

<table>
<thead>
<tr>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q82</td>
</tr>
<tr>
<td>3Q83</td>
</tr>
<tr>
<td>1Q85</td>
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<tr>
<td>3Q86</td>
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<td>1Q88</td>
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<td>3Q89</td>
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<td>1Q91</td>
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<td>3Q92</td>
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<td>1Q94</td>
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<td>3Q95</td>
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<tr>
<td>1Q97</td>
</tr>
<tr>
<td>3Q98</td>
</tr>
<tr>
<td>1Q00</td>
</tr>
</tbody>
</table>

Moody’s Baa Average Yield
Prime Rate
3-Month LIBOR

Note: LIBOR = London Interbank Offer Rate
Sources: Federal Reserve Board, Moody’s, FT London Interbank

Higher-risk companies also have a lower capacity to absorb the cost of higher interest rates. Yet many companies with debt maturing in the near term will likely be forced to pay higher risk premiums than in the past. For example, Moody’s notes that in November 2000, speculative-grade bond yield spreads over seven-year Treasuries reached their widest level since February 1991, at 771 basis points. Chart 3 illustrates further how credit spreads between just-investment-grade bond issues and near-investment-grade bond issues have widened considerably compared with spreads between lower-investment-grade bond issues since the beginning of 2000. Some of the most significant increases in credit spreads have been observed in the high-yield telecommunications sector, where credit spreads over seven-year Treasuries widened by 688 basis points in 2000.9

The effects of tighter credit conditions and a reduced appetite for risk are beginning to emerge in loan origination volumes. According to Loan Pricing Corporation, originations of highly leveraged loans10 through the first three quarters of 2000 fell to $117 billion from $140 billion for the same period in 1999.

Corporate bond trends provide further evidence of financial stress in the domestic market and suggest more near-term deterioration in problem business loans. Corporate bond default rates have climbed significantly since 1997 (see Chart 4). Through November 2000, trailing 12-month default rates on speculative-grade corporate bonds reached 6.8 percent, up from 3.5 percent at the end of 1998. Higher default rates have been accompanied by an accelerated pace of negative ratings revisions, which, according to Moody’s, reached a rate of 3.2 speculative-grade downgrades for every speculative-grade upgrade through the first 11 months of 2000.11 More signifi-

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2 Merrill Lynch Global Bond composites. Issues facing the telecommunications industry are explored further in the article entitled “Three Industries Navigating in a Competitively Charged Environment” in this issue of the Regional Outlook.
3 Loan Pricing Corporation defines highly leveraged loan transactions as those carrying interest rates of 250 basis points or more over the London Interbank Offer Rate (LIBOR).
4 See Moody’s Credit Perspectives, December 4, 2000.
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Moody’s projects that speculative-grade corporate bond defaults will continue to move higher to 9.1 percent over the coming year. Given a fairly strong correlation between speculative bond default rates and banks’ noncurrent loan rates, these projections suggest a continuing rise in the relative level of problem commercial loans.12

Loan Default Risk Is Rising in a Number of Industry Sectors

Evidence from Corporate Bond Defaults

Corporate bond defaults provide clues as to which industries may experience a higher rate of defaults. Chart 4 shows the historical trend in speculative-grade bond defaults since 1988. The initial upward spike in default rates in 1998 was largely the result of events abroad, when 74, or 59 percent, of 126 defaulted issues were attributed to foreign-domiciled issues.13 In 1999, the distribution of defaults shifted decidedly toward domestic issues, with U.S. firms accounting for 99, or 67 percent, of 147 defaults. Of the U.S.-domiciled defaults in 1999, 64 percent were related to industrial sectors, with concentrations in price-sensitive commodity and trade-dependent sectors such as oil and gas, shipping, and steel. Other domestic sectors that experienced a noteworthy rise in defaulted issues in 1999 were telecommunications and health care. Year-to-date 2000 defaults continue to be dominated by U.S. firms.14 According to Moody’s, year-to-date defaulted bond issues have been concentrated in health care; telecommunications; and textiles, leather, and apparel.15

Evidence from Syndicated Loan Trends

Past growth in syndicated loans may be another indicator of default risk. Many lenders appeared to increase their appetite for risk from 1996 through 1999, judging by the growth in leveraged loan and highly leveraged loan volumes during this period (see Chart 5, next page).16 Because rapid loan growth can be an indicator of aggressive risk taking, it is important to review some significant borrowing industries that experienced rapid credit growth from 1996 to 2000. It is also worthwhile to review industries where higher-risk (high-yield) borrowing accounted for a substantial proportion of syndicated loan transactions.

CHART 4

Pace of Speculative Bond Defaults Expected to Rise Significantly

<table>
<thead>
<tr>
<th>Default and Noncurrent Loan Rate (%)</th>
<th>Bond Rating Downgrades to Upgrades (right axis)</th>
<th>Trailing 12-Month Speculative-Grade Bond Default Rate</th>
<th>Bank C&amp;I Noncurrent Rate</th>
<th>Bond Downgrades to Upgrades</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>'88</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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<tr>
<td>'89</td>
<td>9</td>
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<td>11</td>
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<td>'90</td>
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<td>45</td>
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<td>48</td>
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<tr>
<td>'99</td>
<td>49</td>
<td>50</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td>'96 '97 '98</td>
<td>YTD*</td>
<td>YTD*</td>
<td>YTD*</td>
<td>YTD*</td>
</tr>
</tbody>
</table>

* Bond default rates through November 30, 2000
Sources: Moody’s, Call Reports

12 There is a strong correlation between historical speculative-grade corporate bond defaults and noncurrent loan rates. The correlation coefficient between these two variables for the period 1984 to the present is 0.67.
15 Moody’s Credit Perspectives, December 11, 2000. Issues facing the health care and textile industries are explored further in the article entitled “Three Industries Navigating in a Competitively Charged Environment” in this issue of the Regional Outlook.
16 Loan Pricing Corporation defines leveraged transactions as those that carry interest rate spreads of 150 basis points or more over LIBOR and highly leveraged transactions as those that carry spreads of 250 basis points or more over LIBOR. Because these definitions are spread-driven, the rise in the proportion of higher-yield issuance is attributable in part to a general increase in credit spreads. This was the case particularly during the 1998 period, when credit spreads rose significantly.

Memphis Regional Outlook 13 First Quarter 2001
Table 1 lists selected industries\(^ {17} \) that accounted for a significant proportion of syndicated loan volumes from 1996 to 2000, according to Thomson Financial Securities Data. Industries that experienced some of the most rapid growth rates in syndicated loan volumes during that time include utilities, telecommunications, and real estate investment trusts (REITs). Industries that recorded a particularly significant proportion of high-yield transactions during that period include real estate and construction, REITs, health care, and entertainment/lodging/leisure.

**Evidence from Corporate Profit Trends**

Industry sector earnings trends may also be an indicator of industry default risk, because higher defaults are more likely in sectors with weak earnings. As noted above, profit growth rates of domestic firms appear to be decelerating following two years of strong earnings growth overall. Rapid growth in previous quarters appears to have been driven in large part by high-tech and related sectors, such as electronic equipment and communications. These sectors have to a large extent overshadowed noteworthy declines in profit growth in other sectors, such as metals, chemical production, medical services, property casualty insurance, apparel and textiles, manufactured housing, agriculture, transportation, and wholesale trade (see Table 2).

**Evidence from Credit Risk Models**

Credit default models have proliferated in recent years because of advances in technology, data availability, and financial theory. One such model is **KMV LLC's Cred-**

**Table 1**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale and Retail Trade</td>
<td>7.8</td>
<td>-2</td>
<td>-12</td>
<td>34</td>
</tr>
<tr>
<td>Electric, Gas and Sanitary Utilities</td>
<td>6.5</td>
<td>34</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>5.4</td>
<td>28</td>
<td>54</td>
<td>29</td>
</tr>
<tr>
<td>Nondepository Investment Companies</td>
<td>5.2</td>
<td>19</td>
<td>24</td>
<td>33</td>
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<tr>
<td>Oil and Gas</td>
<td>4.1</td>
<td>23</td>
<td>83</td>
<td>18</td>
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<tr>
<td>Securities Brokers/Dealers</td>
<td>3.7</td>
<td>15</td>
<td>13</td>
<td>4</td>
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<tr>
<td>Entertainment/Leisure/Lodging</td>
<td>3.3</td>
<td>5</td>
<td>31</td>
<td>42</td>
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<tr>
<td>Real Estate Investment Trust</td>
<td>2.7</td>
<td>27</td>
<td>25</td>
<td>49</td>
</tr>
<tr>
<td>Health Care</td>
<td>2.6</td>
<td>-4</td>
<td>-41</td>
<td>44</td>
</tr>
<tr>
<td>Real Estate and Construction</td>
<td>2.5</td>
<td>25</td>
<td>46</td>
<td>50</td>
</tr>
</tbody>
</table>

*Note.* HY (high-yield) issuance includes deals priced at 125 basis points or more over LIBOR. Source. Thomson Financial Securities Data

\(^ {17} \)This list is taken from a group of 50 sectors defined using Standard Industrial Codes (SICs). Only industries that accounted for more than 2 percent of 1996 to 2000 origination volumes were considered for inclusion.
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This model, which uses publicly available information to estimate the likelihood of default for individual firms, is widely used by lenders to monitor and evaluate obligor risk and credit risk trends. While it is not the only model available, the KMV model can be applied consistently and easily to the analysis of industry sector credit risk across a broad range of industry groupings.

In brief, the KMV model uses options-pricing theory to derive market-based expected default probabilities or an expected default frequency (EDF).\(^\text{18}\) The model relies mainly on three pieces of information: (1) a firm’s asset market value; (2) the volatility of a firm’s asset market values; and (3) the firm’s capital structure or financial leverage. Although EDF scores are company-specific, median industry expected default probabilities can be constructed and compared across industries and across time to discern relative rankings of industry risk and industry risk trends. These median EDF scores also can be mapped to other default measurement scales, such as external rating agency ratings, based on individual EDF scores of firms with rated debt.

Since the second quarter of 1998, median EDF scores have risen significantly across a wide range of U.S. non-financial industry sectors (see Chart 6, next page). The service and trade sector includes the greatest proportion of firms with high default risk. The median probability of default for the manufacturing sector firms is lower, but it is rising and roughly equaled that of Standard & Poor’s BB-grade (sub-investment-grade) obligors as of December 2000.

Table 2

<table>
<thead>
<tr>
<th>Industry</th>
<th>Annual Growth in Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1998 to 1999 (%)</td>
</tr>
<tr>
<td>Steel</td>
<td>-1,237.9</td>
</tr>
<tr>
<td>Copper</td>
<td>-80.7</td>
</tr>
<tr>
<td>Internet</td>
<td>-43.2</td>
</tr>
<tr>
<td>Tires and Rubber</td>
<td>-81.9</td>
</tr>
<tr>
<td>Aluminum</td>
<td>-13.2</td>
</tr>
<tr>
<td>Chemicals</td>
<td>-38.1</td>
</tr>
<tr>
<td>Medical Services and Information Systems</td>
<td>-48.2</td>
</tr>
<tr>
<td>Property Casualty Insurance</td>
<td>-3.9</td>
</tr>
<tr>
<td>Recreational Goods and Services</td>
<td>.5</td>
</tr>
<tr>
<td>Apparel and Textiles</td>
<td>2.5</td>
</tr>
<tr>
<td>Manufactured Housing and Recreational Vehicles</td>
<td>-9.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>-1.3</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>-8.8</td>
</tr>
<tr>
<td>Cement and Aggregates</td>
<td>1.2</td>
</tr>
<tr>
<td>Oilfield Services and Production</td>
<td>-373.7</td>
</tr>
<tr>
<td>Airlines and Freight</td>
<td>-13.2</td>
</tr>
<tr>
<td>All Corporate Profits (with Inventory</td>
<td></td>
</tr>
<tr>
<td>Valuation and Capital Consumption Adj.)</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Sources: Economy.com Precis Reports; U.S. Department of Commerce, Survey of Business Conditions

\(^{18}\) Typically expressed as the probability of default over the coming year.
Although no one factor can explain the rise in expected default measures for U.S. nonfinancial firms, rising financial leverage is clearly a major determinant. U.S. corporate debt burdens continue to rise in conjunction with the longest-running economic expansion in U.S. history. The debt-to-net-worth ratio (book value) of nonfarm, nonfinancial businesses rose to 83 percent in the second quarter of 2000, up from 72 percent at yearend 1996. Although these figures remain below the relative debt levels experienced in the late 1980s and early 1990s, U.S. businesses are nevertheless becoming increasingly vulnerable to rising credit costs and disruptions in credit availability. Higher asset value volatility has also played a role in rising EDF™ scores, which, as in any options-based credit risk model, leads to a greater likelihood of default.

Chart 7 shows eight of the highest-risk industries in terms of changes in median EDF™ scores over the past two years. These industries were drawn from a list of 50 financial and nonfinancial sectors segregated by Standard Industrial Codes (SICs). For each of these 50 sectors, median EDF™ scores were determined for December 2000 and compared with median EDF™ scores for the same sector in December 1998. Consistent with general industry observations, entertainment and leisure, health care, and telecommunications are among the sectors where default risk has risen most significantly over the past two years.

While Chart 7 illustrates sectors undergoing financial stress, it does not provide information on the relative importance of these sectors to lenders. Thomson Financial Securities Data provides information on the volumes of syndicated loan originations by banks and nonbanks. Matching industry-expected default trends with syndicated loan origination trends by industry is one way to determine the relative importance of higher-risk industry credit exposures.

Chart 8 shows median EDF™ and syndicated loan origination pairs for selected industries during the past three

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[3] Syndicated loan originations are an imperfect measure of actual loan exposures in the financial industry. For example, it is not possible to determine the level of outstanding exposures simply by summing up origination levels from year to year, because payments on long-term debt are not considered. Moreover, a substantial volume of debt represents revolving lines of credit where credit exposures roll over on a periodic basis. Nevertheless, trends in originations do contain some information on the relative level of industry exposures, because they show which industries are borrowing more or less during any given year.
years. Of the industries shown, the telecommunications industry appears to present the greatest degree of risk, given a nearly $50 billion increase in loan volumes from 1998 to 2000, coupled with a 170 percent increase in median expected default levels over the same period. In contrast, loans to securities brokers and dealers can be considered relatively less risky—despite a $17 billion rise in originations from 1998 to 2000—because of a fairly modest rise in median expected defaults. It is also interesting to contrast the health care and entertainment and leisure sectors. Firms in both sectors have experienced a dramatic rise in expected defaults. However, since 1998, Thomson Financial Securities Data shows a significant curtailment in lending to health care companies, while entertainment and leisure originations have held steady over the same period. Because banks appear to be reducing credit exposures to health care firms, banks should eventually see a decline in the level of defaulting debt related to this sector.

Chart 8 illustrates how U.S. syndicated loan issuance and expected default measures can be linked to produce a better sense of risk-weighted industry exposure volumes held by lenders. On the basis of this type of analysis, producing a list of industry sectors that appear to pose the greatest degree of syndicated loan default risk is relatively straightforward. Perhaps not surprisingly, industries such as telecommunications, wholesale and retail trade, entertainment and leisure, health care, and apparel and textiles rank high in terms of risk-weighted industry credit exposures using this analysis.22

Conclusion

Many U.S. banks are experiencing deterioration in business loan quality measures. The adverse effects of higher interest rates, a tightening of credit terms, slowing profit growth, and industry sector weaknesses are the primary contributing factors to this deterioration. Several indicators—including a projected increase in corporate bond default rates, rising expected default trends in certain industry sectors, and evidence of lax underwriting practices in previous periods—suggest that banks could experience substantial further deterioration in business loan quality in the near term.

Although worsening business loan quality is a concern, these negative trends must be put into perspective. In relative terms, current indicators of business loan problems do not approach the experience of banks during the last economic downturn of the early 1990s. Moreover, continued strong earnings and capital provide a significant buffer for banks to weather the effects of higher levels of nonperforming business loans and business loan losses. Nevertheless, the prospect of a slowdown in the economy raises concerns about the possible severity of commercial loan problems, a situation that will undoubtedly be watched closely by both banks and bank supervisors in the coming months.

Steven Burton, Senior Banking Analyst

22 Fifty sectors, grouped by SIC codes, were considered.
Three Industries Navigating in a Competitively Charged Environment

The rising tide of a booming economy in the United States has lifted the boats of a broad spectrum of industries over the past nine years. Some industries, however, have fallen on hard times despite continued economic expansion. These industries represent a broad cross-section of the economy. Problems in these industries were precipitated by diverse factors, reflecting the differences among sectors in industries ranging from old economy (such as textiles) to services (such as health care) to those on the horizon (such as telecommunications).

These industries will navigate in turbulent waters over the next few years. All three face an uncertain economic outlook, changing public policies that can influence their operating environment, and fierce competition.

The importance of these industries to the U.S. economy varies based on employment. The telecommunications industry accounts for about 1.4 million jobs, or 0.85 percent of total U.S. employment. Health care, on the other hand, contributes over 11 million jobs, or 7 percent of total employment. Textile industry employment has been falling steadily for many years and is now under 550,000, accounting for less than 0.40 percent of total U.S. employment.

As diverse as these industries are, a common denominator exists. Intense competition characterizes their operating environment, leaving little room for strategic missteps. Indeed, there have been reports that these industries have been significant contributors to the recent rise in problem bank loans.

With a better grasp of the origins of stress in these industries comes a basis for understanding the lending risks associated with a changing policy and economic environment in the years to come. The following discussion describes trends and developments contributing to stress in these industries and looks at the near- and long-term outlook. Our discussion also looks at the implications for the insured institutions lending to the telecommunications, health care, and textiles industries.

Telecommunications

The telecommunications sector consists of several industry subsectors, including telecommunications services, cable television, and telecommunications equipment, all of which are facing significant challenges.

Telecommunications Services

Rapid growth in the telecommunications services industry has been fueled by strong domestic consumer demand. However, the pace of consumption of telecommunications services has slowed in recent months. This sector has experienced booming growth in revenues from computer network access since 1998, while local and long distance revenues have grown at a much more moderate pace (see Chart 1).

Rapid change and intense competition characterize the industry environment. Long distance businesses, in particular, have experienced fierce competition, resulting in severe pricing pressures. Competitors include both established and new wireline long distance providers, as well as wireless services. Local telephone companies, however, have fared well in recent years, as residences and small businesses have added phone lines to accommodate the growing demand for Internet access. However, as high-speed DSL and cable Internet access become more readily available, the demand for additional telephone lines may diminish, cutting into a lucrative source of revenue for local phone companies.

Capital spending by telecommunications services companies has soared in recent years, although it was expected to level off in 2000 in response to higher interest rates and reduced earnings growth. Nevertheless, high levels of telecommunications equipment investment are expected to continue for the foreseeable future, as telecom service firms require additional equipment upgrades to accommodate increased network traffic and wireless applications (see Chart 2).

Cable TV

Cable TV is another important component of the telecommunications services industry. According to Economy.com, “among the current technologies available, cable is viewed as the leading option for delivering...
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Chart 1

Growth in Telecom Services’ Network Access Revenues Soared in Recent Years

<table>
<thead>
<tr>
<th>Annual % Change in Residential Service Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>'93</td>
</tr>
<tr>
<td>Residential—Network Access</td>
</tr>
<tr>
<td>Residential—Local</td>
</tr>
<tr>
<td>Residential—Long Distance</td>
</tr>
</tbody>
</table>

* Forecast
Source: Economy.com

video, telephony, entertainment, and computing services to households and businesses.” Cable TV sales revenue has grown more than 19 percent a year since 1995. In spite of this stellar revenue growth, most cable companies are not earning a profit because of the high levels of capital investment required.

Telecommunications Equipment

The telecommunications equipment industry is growing rapidly, as telecom service providers rush to upgrade infrastructure to enhance their offerings of high-speed broadband services. Telecommunications service providers are not only upgrading fiber optic and cable line networks; they are rapidly upgrading antiquated circuit-switched networks to more efficient packet-switch networks. However, the growth in revenues and profits was expected to moderate in 2000 because of higher interest rates and slower growth in the domestic economy (see Chart 3, next page).

The wireless phone industry also has experienced problems since late 2000. The major mobile phone companies have missed earnings projections, casting doubt on the growth potential of the industry. Much is riding on the development of third-generation (3G) wireless technology, which is expected to allow wireless access to the Internet, transmission of video and other images, and videoconferencing—all from a handheld mobile phone. Although huge amounts of money are being invested to develop 3G technology, it is unclear what applications will generate the demand to make the investments profitable.

Chart 2

Telecom Services’ Capital Spending Growth Soars

<table>
<thead>
<tr>
<th>(In $ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'92</td>
</tr>
</tbody>
</table>

* Forecast
Source: Economy.com

September 2000. Economy.com, Precis: Industry: Cable TV.
Outlook

The telecommunications industry has been badly battered in both equity and bond markets in the past several months. A spate of bad news has resulted in sharply lower stock prices and higher costs in debt markets. As a result, the availability of financing for some high-risk firms is now questionable. Investors are concerned about the prospect of slowing wireless subscriber growth, continuing capital expenditures, intense competition, and the rapid rise in telecom debt\(^1\) (see Chart 4).

The long-term outlook for the telecommunications services industry is positive. The emergence of high-margin technologies and continued growth in wireless subscriber rates should enhance profitability in the future. Consumers and businesses are also expected to spend an increasing share of their incomes on telecom services. Nevertheless, strong competition, huge investments in equipment upgrades, and rapidly changing technology will force firms to be nimble and innovative.

The long-term outlook for the telecommunications equipment industry is positive, as the demand for data, Internet, and wireless services continues to grow strongly. Nevertheless, individual firms in the industry face a highly competitive environment and rapidly changing technology.

Cable TV’s long-term outlook is also positive because of growing advertising sales and technological developments that should allow cable firms to offer a broader array of services. Still, the competitive environment is fierce. In addition to competing with a host of “traditional” telecommunications firms, cable firms must contend with satellite TV providers, which are partnering with major firms to offer sophisticated communications and entertainment services.

Implications for Banks

The most important characteristics of the telecom industry with respect to lending risks are its highly competitive environment and its pace of technological change. These characteristics suggest that the medium- to long-term outlook for a particular credit may not be well represented by current conditions. The success of telecom firms will be based on management’s ability to adapt to change and compete with a fluid set of competitors.

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Memphis Regional Outlook 20 First Quarter 2001
With both equity and bond markets turning against the telecommunications industry, cash-hungry telecom firms may have difficulty obtaining financing. This could pose a serious risk for banks with a significant exposure to telecom start-ups without a major partner or an investor sponsor.

The high capital requirements and financial leverage of many telecommunications firms complicate these lending risks. Some of these firms are borrowing heavily to put into place an infrastructure to accommodate a demand for services that is yet to come on-stream, meaning that the payback on this investment may not occur for a number of years.

The health care industry’s financial situation has stabilized somewhat in the past year because of widespread consolidation of hospitals and other health care providers. This has helped the industry reach greater levels of efficiency as well as improved bargaining power in negotiations with managed care organizations.

Notwithstanding these favorable developments, other trends continue to pose serious challenges to many firms. Higher labor costs, continued HMO penetration, breakthrough pharmaceutical therapies resulting in reduced demand for services, and increased outpatient volumes have buffeted many health care facilities (see Chart 5 and Chart 6, next page).

**Higher-Risk Sectors**

A better understanding of risks and trends in health care can be gained by discussing its specific sectors. We have segregated these sectors based on the results of an option-pricing model of firm default risk. These models estimate the probability that the market value of a firm’s assets will fall below a level that would trigger default. Firms that have low stock prices, volatile stock prices, or high debt levels will tend to be flagged as having high default risk by such models.

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Health care industry subsectors have been grouped into three categories: higher risk, moderate risk, and lower risk, which refer to the degree of default risk relative to other subsectors in the industry. The estimated default risk across these subsectors varies substantially. The highest-risk health care sectors include Offices of Medical Doctors; Skilled Nursing Care Facilities; Home Health Care Services; Specialized Outpatient Facilities, NEC; and Health Services (see Chart 7).

Offices of Medical Doctors are largely physicians’ practice management firms. These firms acquire a practice of physicians based on a multiple of the practice’s discounted cash flow. The multiple can be several times the practice’s asset value at the time of purchase. However, these firms have had difficulty achieving profitability because of legal restrictions on referrals among affiliated groups of physicians, as well as the reluctance of physicians to submit their medical practice to the criteria of cost control. Total liabilities in this sector have grown rapidly over the past few years.

Skilled Nursing Care Facilities’ earnings have been hurt badly by the BBA. However, they stand to benefit from the Medicare “giveback” provided by the recently enacted BIPA, which seeks to rectify the deeper-than-expected cuts in funding resulting from the BBA. Skilled nursing care facilities’ performance has also been adversely affected by (1) declining occupancy.
rates caused at least partly by increased competition from lower-acuity facilities such as assisted living facilities; (2) rising labor and legal costs; and (3) surging debt service costs. Many of these firms are experiencing severe financial stress. The stressed facilities have registered negative net income for the past year or so, as well as burgeoning debt levels. The high debt levels are the result of acquisitions of ancillary support services that in many cases are not generating adequate cash flow because of the BBA.\(^7\) Most of these firms have seen their interest coverage ratios decline sharply over the past few years.

**Home Health Care Services** focus primarily on respiratory therapy programs and intravenous and infusion services. The industry is undergoing financial stress as a result of the Health Care Financing Administration’s implementation of a prospective payment system that reduced reimbursements on respiratory therapy and infusion therapy.

**Specialty Outpatient Facilities, NEC** are primarily engaged in outpatient care of a specialized nature, such as alcohol and drug treatment and birth control/family planning. They have permanent facilities and medical staff to provide diagnosis, treatment, or both for patients who are ambulatory and do not require inpatient care. Many of the firms in this sector have experienced a rising debt burden over the past few years, pushing default risk to higher levels.

**Health Services** firms are engaged primarily in furnishing medical, surgical, and other health services. Firms listed in this broad category rather than more specific categories include companies providing dental services, laser eye correction, and physical and occupational therapy. Many publicly traded firms in this category have experienced sharply rising liabilities over the past three to four years.

**Moderate-Risk Sectors**
Moderate-risk health care sectors include medical laboratories, hospitals, and HMOs.

**Medical Laboratories** provide professional analytic or diagnostic services to the medical profession or to the patient as prescribed by a physician. Companies with diverse financial performance and risk of default are included in this sector. A number of medical laborato-

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\(^7\)Ibid.
General Medical and Surgical Hospitals provide general medical and surgical diagnostic and treatment services, other hospital services, and continuing nursing services. They have an organized medical staff, inpatient beds, and equipment and facilities to provide complete health care. According to a study conducted by HCIA-Sachs and Ernst & Young, “The BBA created the greatest financial instability that hospitals have experienced since the creation of Medicare in 1965. Yet the most severe reductions have just begun to impact hospitals, and will continue to do so through 2002. The recently enacted Balanced Budget Refinement Act provides little sustained relief to the industry, and significant financial problems are likely to remain.” The study also indicates that smaller hospitals (fewer than 100 beds) are in the “greatest financial jeopardy.” The recent enactment of BIPA will help to stabilize the finances of hospitals over the next several years. However, other trends adversely affecting hospitals include as much as 40 percent estimated excess capacity, rising labor costs, a severe shortage of nurses, continued HMO penetration, breakthrough pharmaceutical therapies, and increased outpatient volumes (see Charts 5, 6, and 8).

Outlook
The outlook for the health care industry has improved substantially in the past year. Industry consolidation and legislation to give back some of the Medicare cuts implemented in the Balanced Budget Act of 1997 have gone a long way to stabilize the finances of hospitals over the next several years. However, other trends adversely affecting hospitals include as much as 40 percent estimated excess capacity, rising labor costs, a severe shortage of nurses, continued HMO penetration, breakthrough pharmaceutical therapies, and increased outpatient volumes (see Charts 5, 6, and 8).

The passage of a Patients’ Bill of Rights in 2001 could also strengthen the hand of health care providers relative to HMOs. Such a bill could contain provisions that would weaken the position of managed care organizations to contain costs and negotiate with health service providers.

Longer term, the demographic trends are positive, with the population aging and life expectancy increasing. The result should be a growing demand for health care services in the future. On the negative side, however, the current trends toward greater use of outpatient procedures and drug therapies will dampen the demand for inpatient hospital services.

Implications for Banks
The opportunities for financing health care firms will continue to grow into the future. Recent experience has shown that the financial performance of many health care providers is profoundly influenced by changes in Medicare policy. As Medicare expenditures grow to occupy a greater and greater place in the federal budget, Medicare policy will be scrutinized to an unprecedented degree, magnifying the importance of understanding the policy risk associated with health care lending.

Powerful demographic trends should lead to the growth in demand for many health care services over the next 10 to 20 years. For example, demand for nursing homes and assisted living facilities will increase sharply as baby boomers reach old age. However, regional supply and demand for these services can get out of balance as providers add facilities to meet demand. Monitoring local demand and supply trends is an important part of assessing the credit risks in these loans.

Textiles
The textile industry has been plagued by excess capacity, fierce competition from cheaper imports, and sagging textile prices. The result was a sharp drop in industry profits in 1999 and continued weakness in 2000.

Recent Trends and Developments
The textile industry is a mature industry that by a number of measures has been declining. Intense competition from low-cost imports has taken its toll on domestic

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* HCIA-Sachs, LLC, and Ernst & Young, LLP. May 1, 2000. *The Financial State of Hospitals: Post-BBA and Post-BBRA.*
In Focus This Quarter

textile businesses. Since 1995, textile imports have increased nearly 50 percent while exports have grown just under 10 percent. A strong dollar should help textile imports continue to outpace exports. As a result of industry consolidation and the movement of many operations offshore, textile employment has continued to fall steadily. Textile employment has dropped from 663,000 in 1995 to an estimated 544,000 in 2000.\(^\text{10}\)

Closely linked to all these trends, labor productivity in the textile industry is low relative to the average for other manufacturing industries because of low output prices and a heavier reliance on labor in the production process.

The Department of Commerce reports that the industry’s profit as a percentage of sales declined from 3.2 percent in 1998 to just 1.3 percent in 1999 (see Chart 9).\(^\text{11}\) Also, drought in the South has had an adverse effect on textile manufacturing firms, as these firms use a large amount of water in bleaching and dyeing fabric.\(^\text{12}\)

Because of improving global demand and plant closings in the United States, many analysts believe textile prices have now reached a low point. Indeed, data for 2000 show a slight increase and some firming of prices in the first three quarters of the year (see Chart 10, next page). Nevertheless, the profit picture seems to have weakened further in 2000 because of an increase in nonoperating expenses.

Publicly traded firms in the textile industry can be separated into six major categories: knitting mills, textile mill products, broadwoven fabric mills–cotton, broadwoven fabric mills–manmade fiber/silk, carpets/rugs, and miscellaneous fabricated textile products. The default risk characteristics of these sectors vary significantly as measured by the median EDF\(^\text{TM}\).

**Higher-Risk Sectors**

The higher-risk sectors include knitting mills, Broadwoven Fabric Mills–Cotton, and Textile Mill Products (see Chart 11, next page).

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firms only). Net income for both firms was off sharply in 1999. Still, some companies registered net income gains in 1999, building on several years of growth in net earnings. Although the 2000 data are incomplete, most firms in this sector have reported weak earnings. Indeed, several firms have reported more quarters of negative than positive net income.

**Moderate-Risk Sectors**

The moderate default risk sectors include Miscellaneous Fabricated Textile Products and Broadwoven Fabric Mills–Manmade Fiber/Silk.

**Miscellaneous Fabricated Textile Products** includes businesses primarily involved in manufacturing curtains and draperies, house furnishings, textile bags, and canvas and related products; performing pleating, decorative and novelty stitching, and tucking for the trade; manufacturing automotive trimmings, apparel findings, and related products; Schiffli machine embroideries; and manufacturing fabricated textile products, not elsewhere classified. Net income for three out of the five publicly traded firms in this sector was negative in 1999. Two of those firms have experienced losses for at least two years' running. Most of these firms reported negative net income through the first two or three quarters of 2000. The three largest firms' total debt has grown considerably over the past few years. The increase is related primarily to financing acquisitions.

**Broadwoven Fabric Mills–Manmade Fiber/Silk** are engaged in weaving fabrics more than 12 inches in width using primarily silk and manmade fibers, including glass. Net income for each of the six publicly traded firms in this category was down in 1999—in most cases down sharply. Earnings for most of these firms...
appear to have continued to deteriorate in 2000. Interest coverage ratios for several firms were down in 1999 and 2000 because of lower income, higher liabilities in some cases, and higher interest rates.

**Lower-Risk Sector**
Manufacturers of carpets and rugs represent the only lower-risk sector in the textile industry.

**Carpets/Rugs** businesses are involved in manufacturing woven, tufted, and other carpets and rugs. This sector, as a group, experienced strong income growth in 1999. Only one out of six publicly traded firms failed to make a profit in 1999, and several firms reported sizable profit increases. Available 2000 data suggest that each of these firms will have generated positive earnings. Two firms dominate the carpet and rug sector, accounting for about 65 percent of 1999 sales for the group. Carpet and rug manufacturing is capital and research intensive, which gives the U.S.-based firms a comparative advantage over overseas companies, which do not have the same level of access to capital markets and an educated workforce.

**Outlook**
Some positive factors could temper the adversity being experienced by the U.S. textile industry. Low fiber costs and an improved trade situation with Asia should strengthen the textile industry in the future. Labor productivity has been rising slowly, as firms continue to invest in labor-saving computer technology and equipment. The industry is pursuing various strategies to remain competitive, including consolidations and mergers and setting up operations in Mexico. Nevertheless, the current slowdown in the U.S. economy and the increased risk of an actual recession has posed challenges for the textile industry.

Another concern for U.S. producers is trade liberalization and its effect on textile imports. The normalization of trade relations with China and the elimination of import quotas by 2005 according to the World Trade Organization (WTO) Agreement on Textiles and Clothing could lead to even greater imports.

**Implications for Banks**
Banks lending to textile firms face an array of risks emanating from the economic environment in which these firms operate. These risks include the ebb and flow of demand associated with the business cycle of the U.S. and world economies; the exchange rate of the U.S. dollar, which affects the competitiveness of domestically produced textile products; and the prices of both inputs and textile products. U.S. trade policy will also have a profound impact on the competitive environment in which domestic textile firms operate. Banks need to monitor these developments carefully.

Concentration risk can be a significant issue for some banks. Textile mill employment is highly concentrated geographically. About 72 percent of all textile mill jobs are located in five southeastern states (North Carolina, Georgia, South Carolina, Alabama, and Virginia). Almost 29 percent of these jobs are in North Carolina alone. Another 18 percent are in Georgia. Even within these states, textile employment can be regionally concentrated, introducing concentration risk to banks with significant exposures to local textile firms. This risk is measured in terms of not only the volume of textile loans in the portfolio but also the spillover effects that plant layoffs can have in the community.

In an increasingly global market, credit risk in textiles will depend on decisions about production processes and intercompany linkages. For example, capital-intensive domestic producers may be in a better position to compete with offshore firms with greater access to cheap labor resources. Some textile firms may be able to enhance profitability and control risk by entering into partnerships with domestic and overseas organizations.

_Stephen Gabriel, Financial Economist_
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