# Regional Outlook

FEDERAL DEPOSIT INSURANCE CORPORATION

FIRST QUARTER 2000

### FDIC KANSAS CITY REGION



# In Focus This Quarter

◆ Recent Trends Raise Concerns about the Future of Business Credit Quality—Commercial and industrial (C&I) lending is one of the largest and fastest-growing lending lines at insured institutions. Recent growth in C&I lending can be attributed to a strong U.S. economy, increased industrial merger activity, and a willingness of lenders to extend credit. While C&I credit quality remains relatively strong, signs of deterioration have recently begun appearing in C&I portfolios and in corporate bond defaults. These signs of weakness in commercial credit quality raise concerns because they are appearing during a period of economic strength. Business credit quality could deteriorate further in the event of an economic slowdown, higher interest rates, or a loosening of underwriting practices. See page 3.

By Arlinda Sothoron, Alan Deaton

◆ Local Industries in the Global Economy—The contribution of international trade to overall U.S. economic activity has been increasing for a number of years. Although the United States trades with many nations, most activity is concentrated in a few markets—Canada, Japan, and Mexico. Across a collection of industries, there is, however, considerable variation in both the level of exposure to export markets and the intensity of import competition. A number of industries are highly exposed to international markets, suggesting that economic conditions abroad are particularly important in any assessment of future revenue growth or profitability. See page 11.

By Paul C. Bishop

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# **Regional Perspectives**

◆ *Region's Economic and Banking Conditions*—More than half the Region's 618 counties have lost population since 1970, and 84 of the more remote counties lost population at an increasing rate in the 1990s. Continuing outmigration threatens the economic viability and health of the banking industry in these counties. In the 1990s, insured financial institutions in these counties reported lower asset, loan, and core deposit growth rates, and they will likely continue to have difficulty growing loans and core deposits within their geographic markets. *See page 19.* 

By John M. Anderlik, Jeffrey W. Walser, Christopher J. Sesler, and Troy D. Osborne 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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# Recent Trends Raise Concerns about the Future of Business Credit Quality

- C&I loan portfolios have been growing rapidly during this economic expansion.
- Indicators of weakening corporate credit quality have begun to appear, including higher C&I loan losses and rising corporate bond defaults.
- The future of business credit quality will depend on the economy and on underwriting practices.

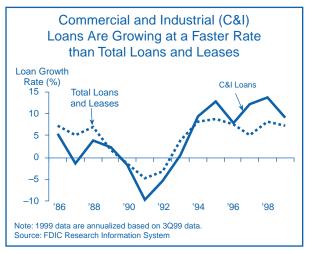
Commercial and industrial (C&I) lending is one of the largest and fastest-growing segments of lending at insured institutions. As of the third quarter of 1999, C&I loans comprised 24 percent of total loans and leases held by FDIC-insured institutions, up from 21 percent at the end of 1995. C&I loan portfolios have grown primarily because of strong loan demand driven by a long economic expansion during which the indebt-edness on corporate balance sheets has expanded rapid-ly. Even as the economic expansion continues, C&I loan charge-offs have begun to trend upward, albeit from historically low levels. By some measures, banks and the financial markets appear to be assuming increased levels of risk that could lead to greater C&I loan losses when the economy eventually weakens.

High rates of growth in commercial lending and weakening indicators of C&I credit quality raise concerns about the future of credit quality at insured institutions. This article examines the factors that have contributed to high C&I loan growth rates and discusses the drivers that will determine the direction of C&I credit quality in the future. While loan performance at insured institutions is relatively good at the present time, signs of deterioration and stress have begun to appear despite the continued strength of the domestic economy. The future of C&I credit quality will ultimately be determined by trends in underwriting and corporate debt levels, along with the performance of the U.S. economy.

### **C&I** Loan Growth Has Accelerated

C&I loans held by FDIC-insured banks and thrifts grew by almost 9 percent during the 12 months ending in September 1999, down somewhat from a 13.4 percent rate of growth in 1998 (see Chart 1). By contrast, total

### CHART 1



loans and leases at insured institutions grew by only 7 percent in the 12 months ending in September 1999. C&I loans accounted for approximately 29 percent of all net new loans booked during the 12 months ending in September 1999, while unfunded C&I loan commitments grew by approximately 17 percent to \$1.6 trillion. Syndicated lending played a major role in C&I loan growth during the 1990s. As intense competition and a narrowing of financial institutions' net interest margins have encouraged lenders to seek additional sources of revenue, larger institutions have become increasingly active as loan syndicators and as purchasers of syndicated credits. Syndicated loan volume reached its peak in 1997, when originations totaled some \$1.1 trillion (see Chart 2, next page).<sup>1</sup> After falling off in 1998, originations of syndicated loans rose by 17 percent in 1999 to just over \$1.0 trillion. Leveraged loans, in which the borrower's debt-to-equity ratio is significantly higher than the industry average, served as a catalyst for syndicated lending growth in 1999, accounting for 32 percent of total syndicated loan originations. Leveraged lending is very attractive to lending institutions because of the generous fee income associated with leveraged originations. Leveraged loan originations grew to \$320 billion in 1999, partly because of the continued rapid pace of corporate mergers in 1999.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> LPC Gold Sheets, Vol. XIV, No. 1. Loan Pricing Corporation. January 10, 2000.

<sup>&</sup>lt;sup>2</sup> According to Houlihan Lokey's *Mergerstat*, total M&A activity set a new record of \$1.4 trillion in merger deal value in 1999.

Most of the C&I loan growth among insured institutions since 1997 has been concentrated in loans to domestic borrowers. C&I loans held in foreign offices declined following the Asian economic crisis and the Russian government bond default in 1997 and 1998, respectively, while domestic C&I lending was growing at doubledigit rates. During the 12 months ending in September 1999, C&I loans held in domestic offices grew 12.2 percent while C&I loans held in foreign offices declined by almost 6 percent.

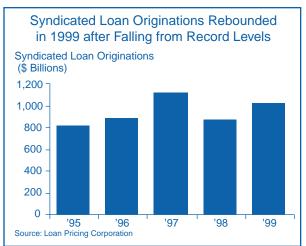
# Is This Rapid Loan Growth a Cause for Concern?

The effect of rapid loan growth on subsequent credit quality has been the subject of a number of articles. A recent study by the Federal Reserve Bank of Kansas *City* found that high rates of loan growth in the early 1980s and early 1990s appeared to be positively correlated with future higher loss rates.3 The study also noted, however, that relatively high loan growth rates in the late 1980s did not result in sharply higher loss rates. Another study by the Federal Deposit Insurance Corporation found that banks that failed during the banking crisis of the 1980s were generally more likely to have grown their loan portfolios aggressively than banks that did not fail.<sup>4</sup> But it remains to be seen whether the high C&I loan growth rates of today will necessarily contribute to higher losses for insured institutions in the future. The future course of industry loan losses depends on many factors, including the condition of the economy, the interest rate environment, and underwriting standards used in originating C&I credits.

### The Condition of the Economy Is an Important Driver of C&I Loan Growth

Recent economic conditions have been particularly conducive to rapid growth in domestic C&I lending. Business investment has expanded at double-digit annual rates as firms have invested in new technologies to raise productivity and keep costs down. These productivity gains have been instrumental in allowing the

#### CHART 2



economy to grow at a relatively rapid pace with low inflation. Strong growth in real wages has helped boost the consumer confidence index to an all-time high of 144 in January 2000. Robust consumer demand for goods and services has kept business profits growing, further spurring business borrowing to finance inventories, new construction, and fixed assets such as computer networks. Amid all of these favorable trends, C&I loan charge-off rates have remained at record lows of less than 0.5 percent since 1994. Recently, however, despite a continuation of generally favorable conditions in the economy and the financial markets, signs of credit quality deterioration have begun to appear in C&I loan portfolios.

### Evidence from Financial Institutions Points to a Weakening in Business Credit Quality

Despite strong business conditions and generally good asset quality, signs of deterioration in C&I credit quality have begun to appear in bank portfolios. While problem C&I loan levels remain low by historical standards, net C&I loan charge-offs during the 12 months ending in September 1999 were 63 percent higher than during the previous 12-month period. The net C&I loan charge-off rate rose in the 12 months ending in September 1999 to 0.5 percent, up from 0.3 percent one year earlier. Similarly, noncurrent C&I loans as of September 1999 rose to \$11.2 billion, or 1.2 percent of total C&I loans.<sup>5</sup> In dollar terms, this level of noncurrent loans is 30 percent higher than one year earlier.

<sup>&</sup>lt;sup>3</sup> William R. Keeton. "Does Faster Loan Growth Lead to Higher Loan Losses?" *Economic Review.* Federal Reserve Bank of Kansas City. Second quarter 1999.

<sup>&</sup>lt;sup>4</sup> Federal Deposit Insurance Corporation, Division of Research and Statistics. *History of the Eighties: Lessons for the Future. Vol. 1, An Examination of the Banking Crises of the 1980s and Early 1990s.* 1997. http://www.fdic.gov/bank/historical/history/contents.html.

<sup>&</sup>lt;sup>5</sup> Noncurrent C&I loans include C&I loans past-due over 90 days and all C&I loans in nonaccrual status.

Despite these increases in C&I charge-offs and noncurrent C&I loans, the current industry ratios for these measures remain well below the 1.9 percent and 4.5 percent ratios reported during the recession in 1991 for net C&I charge-offs and noncurrent C&I loans, respectively.

### Interagency Loan Review Reveals Increases in Problem Credits from Previously Low Levels

The results of the *1999 Shared National Credit (SNC)* review provide another indication of slipping credit quality at large commercial banks.<sup>6</sup> According to the *Federal Reserve Board of Governors*, adversely classified syndicated loans rose to \$37.4 billion in the 1999 review, a level approximately 70 percent higher than that reported in 1998. This figure represents 2 percent of the \$1.8 trillion in drawn and undrawn loan commitments reviewed in 1999. By contrast, adversely classified assets identified in the 1998 SNC review totaled only \$22 billion, or 1.3 percent of loans reviewed in 1998.<sup>7</sup>

While the level of adversely classified syndicated loans remains low, 14 percent of the loans adversely classified during the 1999 review were loans made to new borrowers since the 1998 SNC review. In reference to this finding, *Office of the Comptroller of the Currency (OCC)* First Senior Deputy Comptroller and Chief Counsel Julie Williams has noted that "Banks are booking new loans that are weak at their inception."<sup>8</sup> The high rate of adversely classified new loans could be attributable to the continued effects of loan originations made toward the end of a period of loosened underwriting standards in 1997 and early 1998. Alternatively, it could indicate a higher-risk credit mix in current C&I loan portfolios.

Signs of corporate stress that may weaken credit quality at insured institutions are also reflected in recent *Banc of America Securities* analysis of publicly available bank loan amendments.<sup>9</sup> This study shows a significant increase in the number of loan amendments

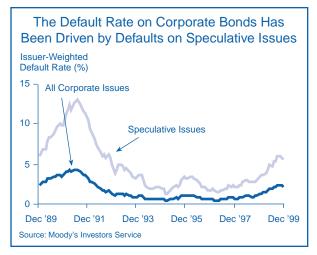
<sup>7</sup> Federal Reserve Board Press Release. November 10, 1999.

generated because of covenant relief requests, from 22 percent of all loan amendments during the last six months of 1998 to 45 percent during the first ten months of 1999.

### **Corporate Bond Defaults Soared in 1999**

Trends in corporate bond defaults also indicate increasing levels of stress in the corporate sector. During 1999, 147 issuers defaulted on \$44.6 billion in long-term debt. Default rates as a percentage of volumes outstanding (or dollar default rates) have trended upward each year since 1996, reaching 2.2 percent for all corporate issues at year-end 1999. Much of the increase can be attributed to a rising dollar default rate for speculative-grade issues, which peaked in November 1999 at 8.2 percent. Measured as a percentage of all issuers, the default rate for speculative-grade issues rose to a post-1991 high of 6 percent in September 1999 (see Chart 3). According to Moody's, year-end 1999 default rates improved marginally but are expected to remain high through mid-2000.10 In addition, domestic speculative-grade issuers reported twice as many issuer downgrades as upgrades during the fourth quarter of 1999, although the dollar volume of upgrades exceeded the dollar volume of downgrades by 55 percent.11

### CHART 3



<sup>&</sup>lt;sup>6</sup> The annual interagency process reviews commercial loans over \$20 million that are shared by three or more participants.

<sup>&</sup>lt;sup>8</sup> "OCC's Williams Warns of Credit Risk in the Banking System; Calls for Bankers to Scrutinize Loan Portfolios More Closely." OCC Press Release. October 5, 1999.

<sup>&</sup>lt;sup>9</sup> "Leveraged Loans: The Plot Thickens." Banc of America Securities Syndicated Finance Research. November 15, 1999. This loan amendment analysis was completed using only publicly available information from Loan Pricing Corporation and Banc of America Securities LLC.

<sup>&</sup>lt;sup>10</sup> "Corporate Bond Default Rates Highest Since 1991." Moody's Investors Service. October 13, 1999.

<sup>&</sup>lt;sup>11</sup> "Moody's Default Rate Pendulum." Moody's October 1999 Commentary. Moody's Investors Service. October 18, 1999.

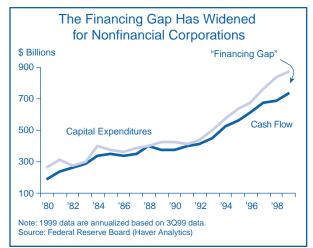
### Why Are C&I Loan Losses Increasing Amid Strong Economic Growth?

Several factors have contributed to the current signs of deterioration of C&I credit quality in an environment of favorable business conditions. These factors include global competition and deflationary pressures, an increase in corporate debt levels, loosened underwriting standards, and a greater appetite for risk.

Global competition and deflationary pressures have squeezed revenues. An era of low inflation and intense global price competition has contributed to low or negative revenue growth in a number of domestic industry sectors, particularly commodities and manufacturing.<sup>12</sup> The result has been an increase in loan losses and corporate bond defaults in these sectors. Moody's noted that the industrial sector, weakened by low commodity prices, accounted for 64 percent of all defaults in 1999, with the oil and gas, steel, and shipping industries being especially hard-hit.<sup>13</sup> For example, Standard & Poor's (S&P) reports that third-quarter 1999 earnings for the iron and steel sector declined 80 percent from one year earlier after five consecutive quarters of negative year-over-year earnings growth. Initially, commodity price declines and the international economic turmoil in 1997 and 1998 resulted in slowed foreign C&I lending and increased net losses of C&I loans held in foreign offices. These losses accounted for the majority of net C&I loan losses in 1997 and 1998. However, this adverse trend reversed itself in 1999, when C&I loans held in domestic offices accounted for the majority of losses.

**Corporations are increasingly reliant on debt markets.** Increasing levels of debt on corporate balance sheets have helped to foster C&I loan growth. The growth in corporate debt is partially a result of actions taken by firms to improve operating efficiency, including increasing merger and acquisition (M&A) activity and rising spending on fixed investments. Capital expenditures on fixed investments by businesses have increased at a steady rate since the 1990–91 recession, as evidenced by Chart 4. Cash flow has also been increasing, but at a slower rate, resulting in a growing "financing gap" that reached an annualized level of

#### CHART 4



\$142 billion in the third quarter of 1999. Where cash flow has not been available to finance investment, firms have turned primarily to debt financing as opposed to equity financing. Net new corporate equity issues by nonfarm nonfinancial corporations have been negative in each year since 1993, while net new corporate bond issuance has increased from \$75 billion in 1993 to \$219 billion in 1998.

Loosened underwriting standards in 1997 and early 1998 are contributing to current losses. Signs of stress in C&I loan portfolios can be partially attributed to loosened underwriting standards in 1997 and early 1998. During 1997 and early 1998, loan underwriting standards loosened, accompanied by reduced spreads and pricing. In May 1998, the Federal Reserve Board Senior Loan Officer Opinion Survey on Bank Lending Practices reported that domestic banks were "generally eager to make loans to businesses" and that during early 1998 "a large percentage cut their spreads on such loans." Moody's describes the second half of the 1990s as a "mini credit cycle." The cycle began in 1995, when the strong economy, accompanied by falling interest rates and low loan losses and default rates, encouraged investor demand for high-yield bonds and loans.14

A record number of first-time speculative-grade deals were also brought to market during 1997 and early 1998. The increase in the volume of issuance was itself enough to push the default rate lower, which in turn may have fueled investor demand for additional high-risk bonds. However, the Asian crisis during 1997 and the Russian debt default during the second half of 1998

<sup>&</sup>lt;sup>12</sup> See also Richard A. Brown and Alan Deaton. "Falling Prices in Commodities and Manufacturing Pose Continuing Risks to Credit Quality." *Regional Outlook*, third quarter 1999. http://www.fdic.gov/ bank/analytical/regional/ro19993q/na/t3q1999.pdf.

<sup>&</sup>lt;sup>13</sup> "Historical Default Rates of Corporate Bond Issuers, 1920–1999." Moody's Investors Service, January 2000.

<sup>&</sup>lt;sup>14</sup> "Default Rate Pendulum." October 18, 1999.

caused new issuance of speculative-grade bonds to slow significantly while defaults rose sharply, to a rate of 6 percent by issuer in September 1999. While speculativegrade bond issuance declined, banks stepped in to fill the void by raising originations of highly leveraged loans between second-quarter 1998 and fourth-quarter 1999.<sup>15</sup>

Financial markets have evidenced greater risk appetite. While the ratio of speculative-grade bond issues to total corporate bond issues has remained fairly stable at approximately 40 percent during the past decade, the composition of borrowings has shifted substantially. Moody's reports a shift in the distribution of bond issue ratings within the speculative-grade category toward the lower end of the ratings scale (see Chart 5).<sup>16</sup> Evidence of this shift is demonstrated by the fact that bonds rated B3 or lower currently comprise approximately 35 percent of all speculative-grade issues, a record high and up from 24 percent in 1995.<sup>17</sup> Furthermore, almost 50 percent of the issuers that defaulted during the year ending September 1999 were rated for three years or less.18 This change in the composition of ratings has contributed to the current increase in speculative-grade defaults and could affect the future volatility and liquidity of the market. The current high volume of corporate bond defaults reflects the looser standards in 1997 and 1998 for corporate debt issued by low-rated first-time issuers, who accounted for 40 percent of rated

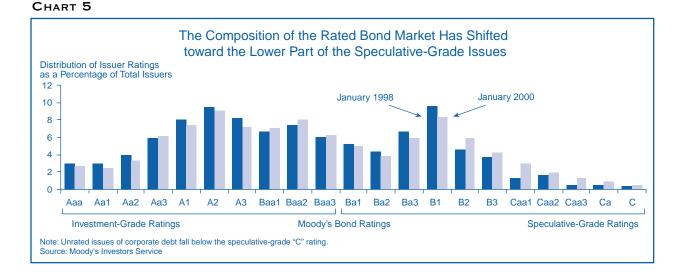
cial Comment. Moody's Investors Service. December 15, 1999.

bond defaults in 1999.<sup>19</sup> This relationship is analogous to the current increase in net C&I charge-offs partially attributable to weakened underwriting standards in 1997 and early 1998.

### The Increase in Leveraged Lending Could Result in a Riskier Mix in C&I Loan Portfolios

Leveraged lending comprises an important part of the syndicated lending market and generates considerable fee income for financial institutions. Leveraged loans have grown from 12 percent of total syndicated loan originations in 1995 to 32 percent in 1999 (see Chart 6, next page). Leveraged syndicated loan originations grew 19 percent to \$320 billion in 1999, as investors were seeking higher risk-adjusted returns and lenders were seeking higher fees. Paine Webber analysts estimate that leveraged lending accounts for over 80 percent of syndicated loan fees and profits earned by loan underwriters.20 Highly leveraged lending increased to a new record of \$190 billion in 1999.<sup>21</sup> This growth in loan originations reflects the current high corporate demand for loans, and by definition these loans are being made to borrowers with higher-than-normal levels of financial leverage and risk. In return for their higher risk profile, leveraged borrowers must compensate financial institutions through higher pricing and higher fees.

<sup>&</sup>lt;sup>21</sup> Loan Pricing Corporation defines highly leveraged loans as those for which pricing exceeds 250 basis points over LIBOR and generally involves sub-investment-grade credits.



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<sup>&</sup>lt;sup>15</sup> LPC Gold Sheets. January 10, 2000.

<sup>&</sup>lt;sup>16</sup> Moody's January 2000 Commentary. January 18, 2000.

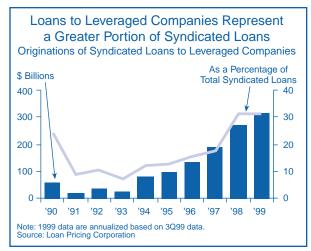
<sup>17 &</sup>quot;Refunding Risk for Speculative Grade Borrowers." Moody's Spe-

<sup>&</sup>lt;sup>18</sup> "Default Rate Pendulum." October 18, 1999.

<sup>&</sup>lt;sup>19</sup> Moody's January 2000 Commentary. January 18, 2000.

<sup>&</sup>lt;sup>20</sup> "The Biggest Secret of Wall Street." Paine Webber Equity Research. May 14, 1999.

#### CHART 6



Leveraged lending volumes have recently been partially driven by M&A lending, which comprised over 30 percent of the total syndicated loan market in 1999. M&A activity approached \$1.4 trillion in total volume during 1999, increasing the demand for capital and driving corporations to the loan market.<sup>22</sup> Approximately 22 percent of leveraged loans originated in 1998 were to the media and telecommunications industries, which have experienced significant levels of M&A activity.<sup>23</sup> Leveraged buyout activity contributed an additional 15 percent to leveraged lending volumes, surpassing 1998 levels in quantity.

#### Where Is Business Credit Quality Heading?

The future direction of business credit quality will be influenced by several factors, including the condition of the economy, growth in the indebtedness of corporate borrowers, exposure to vulnerable industry sectors, the interest rate environment, the development of emerging markets, and underwriting standards.

Economic growth will remain an important determinant of credit quality. Should economic growth slow and corporate profits decline, the demand for C&I loans is likely to fall, and problem asset levels are likely to rise. A recent S&P survey of global credit conditions noted that excessive credit, attributable to unsustainable corporate indebtedness and falling asset values, has weakened the financial systems of 20 nations. As for credit expansion in the United States, the survey noted that the ratio of private sector loans outstanding to gross domestic product rose from 101 percent in 1995 to 142 percent in 1999. S&P also noted evidence that banks' C&I loan portfolios may be relying too heavily on loan repayments based on projections that are realizable only if the current economic expansion continues. S&P estimates that 5 to 15 percent of bank loans could default should the United States experience a significant downturn in the stock market leading to a hard landing for the domestic economy.<sup>24</sup>

**Continued growth in corporate indebtedness could contribute to increased losses and defaults.** The growth rate of corporate debt has surpassed the growth rate of the economy in each year since 1994. A widening financing gap and increasing debt levels could pose problems if there are adverse changes in the interest rate environment or if corporate revenue growth slows. Rising rates will increase the costs of servicing debt, while a slowdown in revenue growth would reduce the cash flow available to service outstanding debt. Under such a scenario, business bankruptcies and failures are likely to rise, causing increased loan losses and bond defaults.

Lending to some industries involves high-risk exposures. Despite the strength of the U.S. economy, some domestic industries are continuing to experience stress. Exposures to weakened industry sectors, such as health care and oil and gas, could negatively affect C&I credit quality at insured institutions. One way to evaluate the relative riskiness of firms operating in a given industry is through KMV Corporation's® Expected Default Frequency<sup>TM</sup> (EDF<sup>TM</sup>) analysis. KMV Corporation<sup>®</sup> has developed a proprietary method of measuring the degree of credit risk inherent in corporate borrowers by calculating an EDF<sup>TM</sup> score to estimate the probability that a firm will default on its obligations within one year.25 Chart 7 diagrams syndicated loan exposures along with December 1999 EDF™ scores and the direction of change since December 1998. This chart illustrates one measure of the risk associated with the 10 industry sectors having the highest expected default

<sup>&</sup>lt;sup>22</sup> Houlihan Lokey's Mergerstat. www.mergerstat.com.

<sup>&</sup>lt;sup>23</sup> "The Biggest Secret of Wall Street." May 14, 1999.

<sup>&</sup>lt;sup>24</sup> "Global Financial System Stress: The Weak, the Vulnerable, and Those Limping Toward Recovery." Standard & Poor's. December 17, 1999.

<sup>&</sup>lt;sup>25</sup> KMV's\* proprietary calculation for EDF<sup>TM</sup> is based on (1) the current market value of the firm, (2) the structure of the firm's current obligations, and (3) the vulnerability of the firm to large changes in market value. Multiplying industry originations by median industry EDF<sup>TM</sup> scores provides an estimate of expected default volumes. This figure provides a more meaningful measure of aggregate lending risk exposure than pure origination volumes alone and can be used to rank industry exposures.

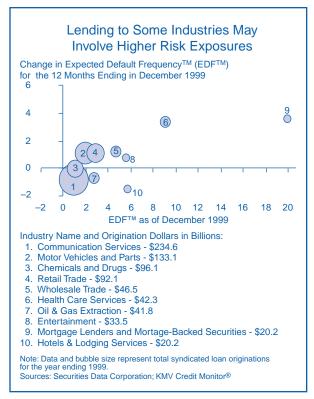
volume based on the volume of 1999 syndicated loan originations. In 1999, loans originated to mortgage lenders (including subprime lenders), communications firms, oil and gas firms, health care firms, and retail trade organizations generated the five highest expected default volumes among 50 broad industry sector classifications.

The interest rate environment and refunding risk affect the demand for and availability of credit. Declining interest yield spreads from 1996 to 1998 benefited borrowers. As spreads declined, the rate of syndicated loan growth increased and refinancing activity was high. Increases in spreads since 1998, along with higher interest rates, have caused refinancing activity to slow significantly. However, rising rates have not significantly affected origination volumes, as new debt continues to come into the market. Rising interest rates and refunding risk particularly affect speculative-grade borrowers. Higher interest rates would raise businesses' cost of borrowing, potentially decreasing the demand for business credit and impairing borrowers' ability to repay their debts. Once a corporation's debt service ability is compromised, access to new capital markets can become limited. A sharp rise in interest rates would particularly impair the ability of highly leveraged firms to repay floating-rate debt obligations.

Refunding risk continues to be a concern for speculative-grade borrowers as they face potential problems refinancing the maturing portions of long-term debt. The current tightening of terms in the C&I market and increasing default rates heighten refunding risk to borrowers. Rising interest rates or limited access to secondary markets could also increase refunding risk. This situation could continue to be problematic, since a rising volume of speculative-grade borrowings, consisting largely of unsecured bank debt, matures in 2001 and 2002. Specifically, \$64 billion in speculative-grade debt matures in 2001 and 2002, and approximately 63 percent of the debt is unsecured.<sup>26</sup>

Potential growth in new markets presents both opportunities and challenges. The Internet and European syndicated loan markets represent both future potential growth areas and possible sources of credit risk for C&I lenders. The Internet has introduced large new markets to the loan and bond markets and has

#### CHART 7



increased market efficiency. The "Internet economy" grew 68 percent from the first quarter of 1998 to the first quarter of 1999, with annual revenue expected to exceed \$500 billion in 1999.<sup>27</sup> Internet technology has improved the efficiency of the syndicated loan markets, with recent changes including the development of public price reporting, credit ratings, and Internet sites for online trading.<sup>28</sup> Increased levels of credit risk could result from the volatility of Internet stock prices and the competitive disadvantage faced by firms that do not have an Internet presence but must compete against firms that do.

While the majority of syndicated loan financing currently occurs in the United States, analysts predict that syndicated lending activity in Europe will accelerate significantly because of increased cross-border competition generated by the introduction of the euro and new financing needs. In addition, the European high-yield bond market is still developing but produced \$6.8 billion of volume in the third quarter of 1999, or 61 per-

<sup>&</sup>lt;sup>26</sup> "Refunding Risk for Speculative Grade Borrowers." December 15, 1999.

<sup>&</sup>lt;sup>27</sup> "Internet Indicators." The Center for Research in Electronic Commerce at the University of Texas Graduate School of Business. October 27, 1999.

<sup>&</sup>lt;sup>28</sup> "Syndicated Loan Market Soars as Efficiency Increases." *The Wall Street Journal*. December 6, 1999.

cent of the total market.<sup>29</sup> Domestic lenders have begun to compete for this market but face credit risks because the European markets also pose sovereign and foreign exchange risk.

### Underwriting Remains the Key to Assessing C&I Credit Quality

The August 1999 OCC Survey of Credit Underwriting Practices reported some tightening of commercial loan underwriting standards. However, loan officers also reported increased embedded risks in commercial loan portfolios for the fifth consecutive year. Survey respondents attributed the increased risks to weakened underwriting standards in previous years. The November 1999 Federal Reserve Board Senior Loan Officer Opinion Survey on Bank Lending Practices found that 30 percent of domestic banks reported increasing risk premiums, credit line costs, and loan spreads during the

preceding three months. Loan officers cited an uncertain or unfavorable economic outlook, an expected worsening of industry-specific problems, and a reduced tolerance for risk as reasons for tightening C&I lending standards.



Despite signs of tightening underwriting standards, the mix of credits appears to be riskier than in recent times. The OCC issued an advisory to banks in May 1999 warning of potential problems with leveraged lending. The OCC stated that highly leveraged corporations could be particularly vulnerable to economic weakness and may not be able to compete effectively in a rising interest rate environment. The OCC also addressed reliance on enterprise value loans, which are often used to support leveraged lending. Enterprise values are calculations based on projections of the future income of a firm. If such estimates are overly optimistic, or if the company fails to meet the assumptions underlying these estimates, the lender may be subject to considerable credit risk. The last interagency SNC review also noted instances of inadequate documentation and support for enterprise loans.<sup>30</sup>

### Summary

C&I lending is one of the largest and fastest growing lending lines at insured institutions. Recent growth in C&I lending can be attributed to a number of factors, including a favorable economy, merger and acquisition activity, and other sources of high loan demand, strong asset quality, aggressive pricing, and attractive fee income. While indicators of C&I loan performance remain generally strong, signs of deterioration in commercial credit quality have begun to surface. These signs are cause for some concern because they are surfacing during a period of remarkable economic strength. Increasing corporate indebtedness, signs of corporate stress, and adverse trends in corporate bond defaults suggest that an economic downturn could result in a much more challenging environment for business credit quality.

> By Arlinda Sothoron, Senior Financial Analyst Alan Deaton, Economic Analyst

<sup>&</sup>lt;sup>29</sup> LPC Gold Sheets, Vol. XII, No. 44. Loan Pricing Corporation. November 15, 1999.

<sup>&</sup>lt;sup>30</sup> Remarks by OCC First Senior Deputy Comptroller and Chief Counsel Julie L. Williams before the Robert Morris Associates Conference on Lending and Credit Risk Management, October 5, 1999.

# Local Industries in the Global Economy

- The contribution of international trade to U.S. economic activity has risen rapidly during the past decade. The U.S. economy has been increasingly influenced by conditions abroad, such as the recent financial market turmoil in several emerging markets.
- Canada, Japan, and Mexico are the largest U.S. trading partners, accounting for approximately 40 percent of U.S. trade. Western Europe and Asia (excluding Japan) also account for a large share of U.S. trade.
- The importance of trade at the industry level varies widely. The industries most dependent on trade, including machinery and transportation equipment, also account for a large share of U.S. trade.

The value of goods and services traded on international markets has more than doubled during the past decade. More goods and services than ever are being shipped abroad and imported from all parts of the globe. Consequently, U.S. economic activity is increasingly influenced by the flow of goods, services, and capital across national borders.

The increasing importance of international trade is reflected in different types and levels of exposure to international markets. First, total exports and imports compared with overall economic activity confirm the increasing contribution of trade to the economy as a whole. Second, the amount of U.S. trade with foreign markets, although widely varied, is concentrated in a small number of countries, namely Canada, Japan, and Mexico. Consequently, economic conditions in these countries are particularly important in assessing the influence of global economic conditions on U.S. trade. Third, the level of exposure to international trade across industry sectors varies considerably. Some industries are not influenced greatly by activity in international markets, while for other, more trade-dependent industries, conditions in the world economy are an important factor in determining the level of sales and profit. The exposure to international markets, either through reliance on trade with particular countries or via industries with a significant exposure to international markets, is an important consideration for lenders seeking to determine a firm's future profitability and financial condition.

### International Trade Is of Growing Importance

Over the past 30 years, international trade has grown more quickly than the economy as a whole. Exports, which include both merchandise and services, have risen from less than 5 percent of U.S. gross domestic product (GDP) in 1970 to approximately 12 percent today. The merchandise component accounts for about 73 percent of exports and includes manufactured goods, agricultural products, and raw materials such as metals and oil. The services component of exports, accounting for about 28 percent of total exports, includes travel services, passenger fares, royalties, freight and port services, and a number of smaller sectors such as financial and educational services.

Imports also account for a growing share of U.S. consumption of goods and services, exceeding 15 percent of U.S. GDP in 1999, up from 6 percent in 1970. Merchandise is the largest component of imports, accounting for 83 percent, while services account for 17 percent (see Table 1, next page).

Although trade in services has grown quickly for many years, merchandise still accounts for the majority of all trade. The dominance of merchandise is attributable, in part, to the difficulty of trading many types of services. With few exceptions, services are generally produced and consumed within a local market because they cannot be transported easily and are subject to language and cultural barriers. Hospitals, dry cleaners, and movie theaters, for example, serve well-defined local markets and produce products that cannot be traded competitively on international markets. Although trade in services such as travel continues to grow, the remainder of this article focuses primarily on the dominant merchandise component.

### U.S. Trade Activity Has Reflected Recent Global Economic Turmoil

Over time, conditions in the international economy have become an increasingly important influence on U.S. growth, since a rising share of all domestically produced goods and services is sold abroad. Similarly, an increasing volume of imported goods and services implies a higher level of competition for domestic producers that compete directly with imports.

Merchandise Is th	HE LARGEST COMPONENT	OF TRADE	
	Dollar Value* (1998, \$ millions)	Percent of Total	<b>1999</b> Growth**
EXPORTS	\$ 933,910	100.0%	1.8%
Merchandise	682,138	73.0%	0.8%
Agriculture and			
RELATED COMMODITIES	26,603	2.8%	-1.8%
MINERAL COMMODITIES	6,644	0.7%	-17.4%
MANUFACTURED GOODS	593,297	63.5%	-O.1%
Other Merchandise	55,593	6.0%	39.5%
Services	263,662	28.2%	4.3%
TRAVEL	71,250	7.6%	3.0%
Passenger Fares	19,996	2.1%	2.7%
ROYALTIES AND LICENSE FEES	36,807	3.9%	4.1%
FREIGHT AND PORT SERVICES	25,520	2.7%	6.4%
OTHER SERVICES	110,089	11.8%	5.0%
ADJUSTMENTS***	(11,890)		
IMPORTS	\$ 1,098,193	100.0%	10.3%
Merchandise	907,647	82.6%	10.4%
Agriculture and			
Related Commodities	22,859	2.1%	-2.2%
MINERAL COMMODITIES	38,619	3.5%	5.6%
MANUFACTURED GOODS	803,384	73.2%	11.6%
OTHER MERCHANDISE	42,786	3.9%	-0.6%
Services	181,015	16.5%	9.6%
TRAVEL	56,105	5.1%	7.2%
Passenger Fares	19,797	1.8%	8.3%
ROYALTIES AND LICENSE FEES	11,293	1.0%	11.0%
FREIGHT AND PORT SERVICES	30,460	2.8%	11.4%
OTHER SERVICES	63,360	5.8%	10.9%
ADJUSTMENTS***	9,531		

\* Sum of components may not equal total due to rounding. \*\* First three quarters of 1999 versus first three quarters of 1998. \*\*\* Because of different methods of estimating the merchandise and services components of trade, an adjustment term is necessary. Consequently, percentages may not sum to 100. Sources: Bureau of Economic Analysis; Bureau of Census

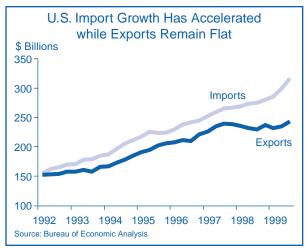
During the past two and a half years, for example, the international economy has been buffeted by a series of crises that resulted in steep exchange rate depreciations for a number of countries and a marked slowdown in economic growth in many emerging markets. Although the U.S. economy remained surprisingly strong during the worst of the emerging markets crises, the fallout was evident in the diverging performance of U.S. exports and imports over the period.

From mid-1997 through mid-1999, U.S. exports were generally flat, reflecting the sluggish pace of growth in several important U.S. export markets. Export prices fell by 4 percent over the period in response to weak demand for U.S. exports. In particular, exporters of agricultural products, basic manufactured goods, and commodities faced rapidly deteriorating conditions in several important overseas markets. For example, the value of merchandise exports to the Pacific Rim fell by 15 percent during the first six months of 1999 compared with the same period in 1997 because of the recent financial market turmoil in the region.

U.S. imports continued to grow during the period, however, reflecting both strong demand for imported goods and falling prices. In fact, average import prices fell by 5 percent between 1997 and 1999. At the same time, competition from imports limited the pricing power of domestic producers that compete with goods produced abroad. Although producers that compete with cheaper imports experienced adverse effects on profitability, consumers and firms that purchased goods from abroad generally benefited from falling import prices.<sup>1</sup>

The slowdown in U.S. export activity and the acceleration of import growth have resulted in an increasing trade imbalance (see Chart 1). The U.S. trade deficit, which reached a record \$26.5 billion in November, has raised concerns among analysts about the vulnerability of the dollar. Faster growth abroad or a slowdown in U.S. growth could convince foreign investors to increase purchases of assets outside the United States, resulting in a sell-off of the dollar. Depending on the severity and speed of a sell-off, heightened financial market volatility and rising U.S. import prices could result. Although potentially many forces are at work in

### CHART 1



such a scenario, rising inflation or a falling dollar may ultimately result in higher interest rates and slower U.S. growth. The extent to which U.S. trade would be affected by such a scenario is difficult to assess, since changes in the prices of either imports or exports would result in both positive and negative effects on firms' costs, revenue, and profitability.<sup>2</sup>

### Most U.S. Trade Is Concentrated in a Few Foreign Markets

Because the United States trades with most nations, economic conditions abroad are one of the critical factors that determine the growth of U.S. trade. Foreign demand for U.S. goods and services depends on the strength of the markets to which exporters ship their goods. Consequently, economic weakness abroad often results in slower U.S. export growth. Economic conditions abroad also influence the level of import competition that U.S. firms experience. Foreign firms facing slack demand in their own domestic markets, much like manufacturers in Southeast Asia during the recent market turmoil, may

<sup>&</sup>lt;sup>1</sup> Weak import prices are a factor cited by analysts to explain the benign performance of U.S. inflation during the past few years.

<sup>&</sup>lt;sup>2</sup> During the early 1980s, the dollar rose by roughly 50 percent, as measured against a trade-weighted basket of currencies. The increase in the value of the dollar made U.S. exports much more costly on world markets and contributed to financial stress among export-dependent manufacturers and agriculture producers. Beginning in mid-1985 the dollar fell sharply, back to its pre-appreciation level. The resulting improvement in U.S. competitiveness contributed to robust growth in U.S. exports that lasted during the rest of the 1980s.

reduce prices of their U.S.-bound goods to compete more effectively with U.S. producers.<sup>3</sup>

Although the U.S. trades with many nations, a large share of U.S. trade is concentrated among a small number of countries. Canada, Mexico, and Japan account for more than 40 percent of merchandise exports and imports. Asia (excluding Japan) and Western Europe each account for just over 20 percent of U.S. exports and a broadly similar share of imports. Central and South America, despite proximity to the United States, account for less than 10 percent of exports and only 5 percent of imports (see Chart 2).

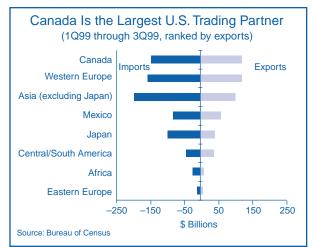
The United States has routinely run a trade deficit with its largest trading partners. The trade deficit with Canada was \$22.8 billion through the first three quarters of 1999. The trade deficit with Mexico topped \$18.8 billion during the same period. The trade deficits with Japan and China, by far the two largest at \$53.4 billion and \$49.4 billion, respectively, accounted for approximately 40 percent of the total U.S. merchandise trade deficit through the first three quarters of 1999.

# The Importance of Trade Varies among Industries

The level of export activity or the intensity of import competition also varies across industries. Besides the overall dollar volume of exports, industries differ in the proportion of total production that is exported. Although some industries, such as leather products, account for a relatively small share of total U.S. exports, exports from this industry make up a large share of all U.S. leather goods production. In cases such as this, conditions in export markets are important for producers even if total export sales from a particular industry are small.

Industries also differ in the share of total spending devoted to imports. Imports account for a relatively

### CHART 2



small portion of all domestic spending on farm products such as grains and livestock, for example, while imports account for a relatively large share of all U.S. oil consumption. These differences expose U.S. industries to varying levels of competition from abroad. In industries characterized by high levels of import competition, import prices may largely shape the domestic pricing environment and, by extension, the revenue and profit growth of domestic firms.

For the purposes of this article, industries can be assigned to one of three broad categories depending on their exposure to international markets either through exports or through the intensity of import competition. Firms in Less Exposed Industries are not directly influenced by conditions in the global markets. Export markets are not a particularly important source of revenue, and imports are a negligible share of all domestic consumption of goods produced by these industries. In contrast, some industries are highly exposed through their reliance on export markets, through competition from imports, or in some cases, through both. For firms in these Highly Exposed Industries, conditions in international markets are clearly one of the important factors influencing current and prospective financial performance. Industries not part of either group, or Moderately Exposed Industries, face some competition from abroad and may earn a relatively small amount of revenue from export markets.

To gauge these differences more fully, a measure of exposure to international markets was calculated for a set of 26 industries (20 manufacturing industries, 4 mining industries, and 2 agriculture sectors). Table 2

<sup>&</sup>lt;sup>3</sup> From the perspective of a foreign exporter, increased sales of goods abroad, even at reduced prices, may be a preferred strategy to offset lower sales within its own weaker domestic market. A foreign steel mill facing weak sales in its home market may choose to sell its output below cost on the world market if it can still cover its fixed costs of operation. There also may be an incentive to maintain or even expand market share and recoup current losses in the future when prices rebound.

TABLE	2

IMPORT SHARE OF U.S. CONSUMPTION					
		Low	Medium	Нідн	
PRODUCTION	Low	Printing and publishing Food products	LUMBER AND WOOD PRODUCTS PETROLEUM AND COAL PRODUCTS AGRICULTURAL SERVICES, FORESTRY, AND FISHING FURNITURE AND FIXTURES	OIL AND GAS EXTRACTION	
EXPORT SHARE OF U.S. PROD	MEDIUM	Coal mining Tobacco products Nonmetallic minerals, except fuels Fabricated metal products	METAL MINING PAPER AND ALLIED PRODUCTS TEXTILE MILL PRODUCTS STONE, CLAY, AND GLASS PRODUCTS RUBBER AND PLASTIC PRODUCTS PRIMARY METAL INDUSTRIES	MISCELLANEOUS MANU- FACTURING INDUSTRIES APPAREL PRODUCTS	
	Нідн	Farm products	CHEMICALS AND ALLIED PRODUCTS INSTRUMENTS AND RELATED PRODUCTS	TRANSPORTATION EQUIPMENT INDUSTRIAL MACHINERY AND EQUIPMENT ELECTRONIC EQUIPMENT LEATHER AND LEATHER PRODUCTS	

summarizes the results of the assessment.<sup>4</sup> Each row shows industries that have high, medium, or low reliance on export markets, defined as the share of U.S. production in a particular industry that is exported. Each industry was ranked by this measure, with the 7 highest industries placed in the High category, the 7 lowest in the Low category, and the remaining 12 in the

Medium category.<sup>5</sup> Table 2 shows, for example, that a relatively low proportion of production in the printing and publishing, lumber and wood products, and oil and gas extraction industries is exported. In contrast, a relatively high percentage of production in the farm products sector, chemicals, and transportation equipment industries is exported.

<sup>&</sup>lt;sup>4</sup> Export share of production (rows in Table 2) was calculated as the ratio of inflation-adjusted exports at the industry level divided by inflation-adjusted production in that industry (Gross Output by Industry from the Bureau of Economic Analysis was used as a measure of industry production). The import share of consumption (columns in Table 2) was calculated as the share of inflation-adjusted industry imports divided by inflation-adjusted domestic production less exports plus imports. All calculations were based on 1997 data, the latest industry-level production data available.

<sup>&</sup>lt;sup>3</sup> This allocation, while completely arbitrary, roughly corresponds to a distribution where 50 percent of the industries are assigned to the Medium category, with the remaining 50 percent evenly allocated between the High and Low categories. Breakpoints for the distribution of industries by export share of production were as follows: Low: less than 7 percent; High: greater than 13 percent.

The industries in each column are categorized by the share of U.S. consumption expenditures in a particular industry that are satisfied by imports. Again, the Low and High categories each include 7 industries, and the Medium category includes the remaining 12 industries.<sup>6</sup> On the basis of this analysis, for example, a relatively low share of U.S. consumption of food, fabricated metals, and farm products is imported. In contrast, a large share of U.S. consumption of oil, apparel, and electronic equipment is imported.<sup>7</sup>

As shown in the lower right cell of the table, four industries are highly exposed to both export markets and import competition. These industries—transportation equipment, industrial machinery, electronic equipment, and leather products—account for slightly less than half of total U.S. exports and a similar percentage of total U.S. imports. Not only are these industries more closely tied to international markets than most other industries examined, but they also account for a large share of U.S. international trade.

Using the terminology introduced above, Highly Exposed Industries are defined as those assigned to either of the High categories; industries in this group either are very reliant on export markets or face high levels of import competition. Less Exposed Industries are defined as those that have little exposure to either export markets or import competition; they are shown in the upper left cell in the Low classification. The remaining industries are defined as Moderately Exposed Industries.

Chart 3 illustrates the distribution of establishments in each of the three categories by Region.<sup>8</sup> Among the

#### CHART 3



group of industries analyzed, most are in the Moderately Exposed Industries category. Of the FDIC Regions, Atlanta, Chicago, and San Francisco have the greatest number of establishments in this category. The Chicago and San Francisco Regions lead in the number of establishments in the Highly Exposed Industries group, followed by the New York and Dallas Regions.<sup>9</sup> Less Exposed Industries account for a relatively small number of establishments. As suggested above, however, most service-sector, construction, and government enterprises, while not part of this analysis, could be classified as Less Exposed.<sup>10</sup>

Although this analysis highlights the varying level of direct exposure to international markets, industries also may be exposed through a less direct secondary channel. Several industries, although not highly exposed themselves, are suppliers to Highly Exposed Industries. For example, the rubber and plastics industry produces goods that are used in the manufacture and assembly of transportation equipment, a Highly Exposed Industry.

<sup>&</sup>lt;sup>6</sup> Breakpoints for the distribution of industries by import share of consumption were as follows: Low: less than 9 percent; High: greater than 25 percent.

<sup>&</sup>lt;sup>7</sup> Although not directly included in the analysis, most domestically produced services also have minimal reliance on export markets and face little import competition. Retail trade, construction, local transportation services, and government, for example, all operate in relatively sheltered markets and are dependent on the health of the local economy. Particular firms may engage in high levels of international activity in tradable services such as travel, but manufacturing, mining, and agriculture account for the majority of imports and exports.

<sup>&</sup>lt;sup>8</sup> An establishment is defined as a single physical location at which business is conducted or services or industrial operations are performed. It is not necessarily identical with a company or enterprise, which may consist of one or more establishments. Data are from *County Business Patterns* (Bureau of Census, 1997).

<sup>&</sup>lt;sup>9</sup> An alternative way of analyzing the establishment data is to calculate the percentage of all establishments across the 25 industries that are in Highly Exposed Industries. On the basis of this calculation, the Dallas Region ranks highest at 42 percent because of the large number of establishments engaged in oil and gas extraction. For the remaining Regions, the percentages vary between 25 percent and 35 percent. Across all industries (including services and other sectors not part of this analysis), the percentage of Highly Exposed Industries in each Region ranges from 1.7 percent (Atlanta Region) to 3.4 percent (Boston Region) of total establishments.

<sup>&</sup>lt;sup>10</sup> These data do not include a count of establishments in the farm products sector (Standard Industrial Code (SIC) 01 and SIC 02). Therefore, 25 industries are represented in the establishment data, and not 26 as in Table 2.

Consequently, conditions in export markets for transportation equipment are of particular interest for manufacturers of certain types of rubber and plastic products. These supplier industries are also vulnerable to import competition through this secondary exposure to international markets. A transportation equipment manufacturer, in response to heightened competition in international markets for its products, may switch from a domestic supplier of rubber products to a cheaper foreign supplier if a favorable price differential emerges. Therefore, assessing the exposure of industries to either exports or imports requires consideration of any secondary linkages between suppliers and purchasers of industry products.

### Summary

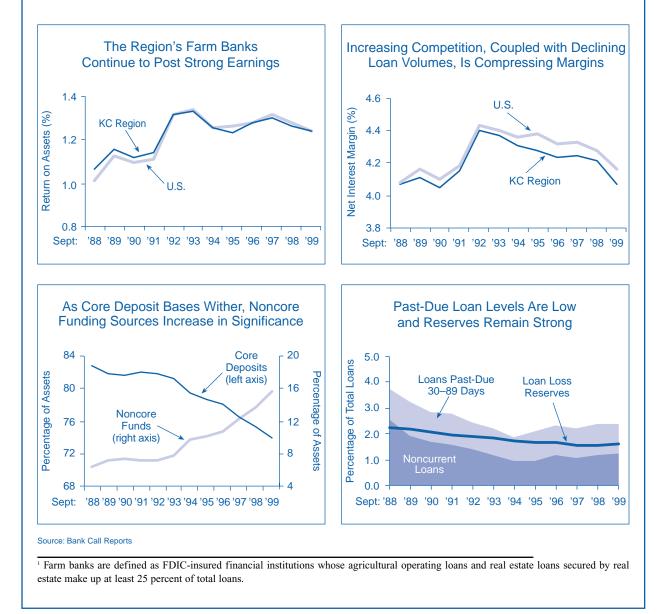
The contribution of international trade to overall U.S. economic activity has been increasing for a number of years. The growing significance of trade has been highlighted by the recent series of economic and financial crises across the globe. One result of recent global economic turmoil has been a slowdown in U.S. export growth resulting from both slumping international demand for U.S. goods and services and weak prices. Import growth has continued unabated, largely because of strong U.S. growth, leading to a rapidly widening trade deficit. The effects of import and export growth on particular industries vary because of differing levels of reliance on export markets and the extent of import competition. This analysis suggests that several industries are highly exposed to changing global economic conditions. Lenders should be aware that for firms in these industries, changes in global economic conditions, including demand for U.S. exports and prices of both imports and exports, largely determine pricing, revenue growth, and profitability.

> Paul C. Bishop Senior Financial Economist

# **Banking Scorecard**

In the aggregate, as of September 30, 1999, the Region's farm banks<sup>1</sup> continued to report sound conditions. Earnings remained strong and contributed to adequate capital levels. Despite continued low commodity prices, problem loans remain manageable and reserve levels provide a cushion against potential loan problems. Funding is a concern as farm banks continue to have problems increasing core deposits and are turning instead to noncore funds to support asset growth. Noncore funds, such as large time deposits, Federal Home Loan Bank borrowings, and brokered deposits, typically are more expensive and volatile than core deposits. Increased interest expenses, coupled with increased loan competition and changing asset compositions, have put moderate pressure on net interest margins.

Record government payments to farmers helped maintain farm banks' relatively low levels of problem loans in 1999. However, given the continued expectation of low commodity prices, farm banks could see a significant increase in past-due loans in 2000.



# **Regional Perspectives**

- Economic conditions in the Region remain strong; however, the actions of some large firms may adversely affect the Region's labor market.
- More than half of the Region's counties have lost population since 1970, and of those counties, almost onequarter are losing population at an increasing rate. Agricultural consolidation and population density trends are driving these population outflows.
- Insured institutions in rural counties that have lost population since 1970 have reported slower asset, loan, and deposit growth than institutions in counties with growing populations. Key differences also exist in loan composition and funding strategies.
- If rural depopulation continues, many banks and thrifts may eventually be located in counties with inadequate population bases, a situation that could lead to consolidation among rural banks or increased risktaking to maintain loan and deposit bases.

## **Overview of Economic and Banking Conditions**

Overall, the Region's economy remains sound heading into 2000 as it continues to expand moderately with little inflation. Labor market analysts expect that increased activity in export markets will strengthen the Region's manufacturing sector, especially durable goods. Commercial real estate conditions remain strong although construction and housing markets have slowed. Consumer spending is robust, and significantly higher oil and natural gas prices have generated renewed drilling activity in the Region.

Despite generally strong economic conditions, areas of weakness exist. For example, the Region's economy has slowed considerably since 1998 as measured by net new jobs created. Consistent with the nation, the year-overyear total nonfarm employment growth rate continued to slow and was 1.1 percent as of October 1999. The Region's unemployment rate is extremely low, below 3 percent, compared with the national rate of 4.1 percent. Labor market tightness and slower employment growth could continue into 2000.

In addition, the Region's labor market may be affected significantly by the actions of certain large firms. The announced merger between Sprint Corporation, **Kansas City**'s largest employer, and MCI WorldCom Inc. may affect the Kansas City metropolitan area. Pending Federal Communications Commission and U.S. Department of Justice approval, the new company, WorldCom Inc., will be based in Clinton, Mississippi, with extensive operations at MCI WorldCom's new campus near Washington, D.C. As a result of the merger, Sprint could see employment reductions in its long-distance operations and divestitures in its localtelephone operations. Sprint's legal, finance, regulatory, and administrative divisions in Kansas City could be vulnerable as well.

The AlliedSignal Inc. and Honeywell Inc. merger was completed on December 1, 1999. The merger will affect the **Minneapolis-St. Paul** metropolitan area, since Honeywell's Minneapolis headquarters will be moved to the new company's Morristown, New Jersey, headquarters. The integration of the two companies is estimated to be completed by mid-year 2000 and is expected to result in a loss of 1,000 to 1,500 jobs in the Minneapolis-St. Paul area. These job eliminations began at year-end 1999 and will be completed by year-end 2000.

Boeing Company, the world's leading aircraft manufacturer, continues to implement workforce reductions. Boeing Wichita, with 21,600 workers at year-end 1998, projects year-end 1999 employment at 16,900. Layoffs are expected to continue, although at a declining rate, throughout 2000. In May 1999, Boeing announced that as many as 7,000 jobs, or 35 percent of the workforce, would be eliminated by mid-2001 at its **St. Louis** facility because of a lack of orders for the F-15 military aircraft. The aerospace industry disproportionately affects the St. Louis economy because of high average salaries and numerous support industries that generate significant secondary economic activity. In addition, the Region's agricultural sector continues to be hampered by low commodity prices. Moreover, rural depopulation is adding to stress in rural areas. This article examines how rural depopulation trends are affecting the Region's rural economy and the banking industry.

### Depopulation Threatens the Viability of Many of the Region's Rural Counties

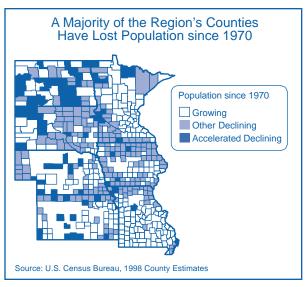
As seen in Map 1, 367 of the Kansas City Region's 618 counties have lost population since the 1970 Census. While this trend has been evident for several decades, a significant subset of the Region's counties is losing population at an increasing rate. According to the U.S. Census Bureau's *1998 County Population Estimates*, 94 counties in the Region lost population at a greater rate in the 1990s than in the previous two decades. Of these 94 counties, 84 are rural counties not adjacent to metropolitan areas.

This article segments the Region's 402 rural counties, nonadjacent to metropolitan statistical areas (MSAs), into three types: the 84 counties with "accelerating declining" populations (AD counties); the 209 counties that are losing population but not at an increasing rate (Other Declining counties), and the 109 counties with increasing population (Growing counties).<sup>1</sup> This article examines why many of the Region's rural counties have lost population since 1970 and why some counties are losing population at an increasing rate. It also discusses likely future scenarios for the economic development of AD counties and Other Declining counties and assesses risks to FDIC-insured financial institutions headquartered in these counties as of June 30, 1999.

### Why Are Many Rural Counties Losing Population?

Population trends in the Region are part of the larger story of rural-to-urban migration that has occurred throughout our nation's history. At the beginning of the twentieth century, 40 percent of the U.S. population lived on farms, but this percentage had declined to less than 3 percent by the 1990 Census.<sup>2</sup> Farm population has declined as farmers have adopted new capital-intensive technologies, leading to a surplus of farm labor and sub-

#### MAP 1



sequent outmigration from rural areas.<sup>3</sup> Because of the relative importance of agriculture in the Region, the implications of rural-to-urban migration are significant.

Over time, farms have declined in number and increased in size. In the Region, the number of farms has declined from 573,000 in 1974 to 438,000 in 1997, while over the same period the average farm has grown from 477 acres to 597 acres. These aggregate statistics actually understate consolidation in the sector, as they are based on the U.S. Department of Agriculture's (USDA) broad definition of a farm, which includes all operations with more than \$1,000 in sales. Farms with annual sales over \$100,000 have seen much greater declines in numbers.

As farms become larger and more technologically sophisticated, their reliance on the local rural economy often diminishes. Larger farms tend to buy inputs, including financial resources, from more distant, larger firms that can provide more services at a lower cost. Ongoing industrialization in many agricultural sectors weakens farms' connections to local rural economies.<sup>4</sup> As seen in the hog industry in **Iowa**, **Minnesota**, and more recently **Kansas**, large integrators have supplied many of the inputs, including working capital

<sup>&</sup>lt;sup>1</sup> AD counties are those that have lost population since 1970 but at a faster rate in the 1990s than from 1970 to 1989. Other Declining counties have lost population since 1970 but did not experience an increased rate of decline in the 1990s. Growing counties have gained population since 1970.

<sup>&</sup>lt;sup>2</sup> Lorraine Garkovich. *Population and Community in Rural America*. 1989. Westport, CT: Greenwood Press. p. 98.

<sup>&</sup>lt;sup>3</sup> Don E. Albrecht and Steve H. Murdock. *The Sociology of Agriculture: An Ecological Perspective.* 1990. Ames: Iowa State University Press. p. 87.

<sup>&</sup>lt;sup>4</sup> Mark Drabenstott and Tim R. Smith. "The Changing Economy of the Rural Heartland." *Economic Forces Shaping the Rural Heartland*. Federal Reserve Bank of Kansas City. April 1996.

to local growers, often to the detriment of competing local suppliers.<sup>5</sup>

Many of the Region's demographic characteristics can be understood in relation to the importance of agriculture. Population densities in the United States are typically low in areas that are dependent on agriculture.6 This is especially true in the Kansas City Region, where the major products are field crops, such as corn, soybeans, and wheat, that are raised on large tracts of land. According to the 1997 Census of Agriculture, 80 percent of the Region's land area is used for farming, compared with the national share of 41 percent. Consequently, the Region's population distribution differs significantly from the U.S. average. According to 1998 Census estimates, the Region's population density was 36.8 people per square mile, compared with a national average of 76.4 per square mile. Of the Region's seven states, only Missouri, a state with the major MSAs of St. Louis and Kansas City, has a density greater than the national average.

# Why Are Some Counties Losing Population at a Faster Rate than Others?

Table 1 presents some of the relevant characteristics of the three types of rural counties, nonadjacent to MSAs, in the Region, categorized by population trends. The data identify several factors that distinguish AD, Other Declining, and Growing counties. First, AD counties are smallest in average population size, with more than half reporting populations of fewer than 5,000. The population data clearly suggest a relationship between county size and the tendency to have an accelerating population decline. Of the 280 counties that had populations of less than 10,000 in 1990, 23 percent were AD counties by 1998. Of the 131 counties with fewer than 5,000 people in 1990, 31 percent were in the AD category, and of the counties with fewer than 3,000 people, 38 percent fell into the AD category.

Outmigration is another important characteristic that distinguishes AD counties from Other Declining and Growing counties. Table 1 shows that in the 1990s, AD counties lost 7.3 percent of their 1990 population, presumably because of better employment opportunities in more economically robust rural or metropolitan counties. Outmigration was 2.1 percent in Other Declining counties, while Growing counties gained 1.9 percent in the 1990s.

The exodus of working-age people has, in turn, adversely affected the demographic characteristics of the counties they left. As Table 1 shows, AD counties are characterized by a disproportionate number of elderly people; 19.0 percent of the population in these counties is older than 65, compared with a national figure of 13.3 percent. The outmigration of younger people from the sparsely populated counties also affects the population growth rate by reducing the rate of natural increase. On average, more people died than were born in AD and Other Declining counties during the 1990s. People in

RURAL, NONADJACENT COUNTIES					
	AD Counties	OTHER DECLINING COUNTIES	Growing Counties	METRO AND Adjacent Counties	
NUMBER OF COUNTIES	84	209	109	216	
Average Population (1998 Estimate)	7,195	9,331	20,434	64,411	
PROPORTION OF COUNTIES WITH FEWER THAN 5,000 PEOPLE	51%	36%	8%	4%	
NET MIGRATION IN THE 1990S	-7.3%	-2.1%	1.9%	1.3%	
NATURAL INCREASE IN THE 1990s	–O.1%	-0.1%	3.5%	5.2%	
PROPORTION OLDER THAN 65	19.0%	18.9%	14.6%	12.4%	

### TABLE 1

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<sup>&</sup>lt;sup>5</sup> Mark Drabenstott. "This Little Piggy Went to Market: Will the New Pork Industry Call the Heartland Home?" *Economic Review.* Federal Reserve Bank of Kansas City. Third quarter 1998. p. 98. <sup>6</sup> Albrecht and Murdock. p. 152.

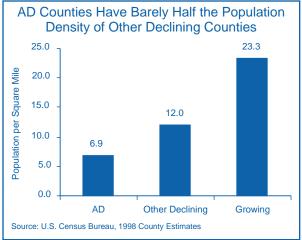
their childbearing years are those most likely to leave the sparsely populated counties in search of other opportunities, leading to a lower birth rate, while the disproportionately high population of elderly leads to a higher death rate.

Population density most clearly distinguishes AD counties from other county types. As seen in Chart 1, which compares the population densities of the Region's three categories of rural nonadjacent counties, AD counties have an average population density considerably less than even that of Other Declining counties.

Many demographers argue that communities whose populations fall below a critical mass are destined for irreversible decline, as the local economies no longer have sufficient human resources to maintain viability.7 Given their low population bases and densities, some AD counties may already exhibit these characteristics. Counties with very low population bases often face difficulties maintaining infrastructure and public services. Smaller rural counties also face increasing difficulty maintaining a full range of government services, such as education, utilities, public roads, and health care.8 The per capita cost of providing these services is high in areas with low population density, where relatively few people must share the fixed costs associated with such investments. As such, areas of low population density may face a vicious circle as residents attempt to maintain an infrastructure to support the current level of economic activ-

<sup>&</sup>lt;sup>8</sup> Thomas D. Rowley. "Sustaining the Great Plains," *Rural Development Perspective*. Vol. 13. June 1998. p. 4.





ity. However, as cost per capita increases, many communities are unable to maintain or develop the infrastructure necessary to attract new economic activity.<sup>9</sup>

The demographic data discussed above suggest that the Region's AD counties may be facing irreversible decline. While the population of the majority of the Region's counties has long been in decline, AD counties are most in danger of losing their viability.

# Accelerated Depopulation More Prevalent in the Western Half of the Region

Within the Region, there are substantial differences between the western states (**North Dakota, South Dakota, Nebraska,** and Kansas) and the eastern states (Minnesota, Iowa, and Missouri). As shown in Table 2, the western states' population densities are less than those of the eastern states. Much of this difference can be explained by variation in the nature and productivity of the agricultural sector.

Population densities depend, in part, on the productive capacity of the land and the ability of the local economy to support other kinds of activity. In a state such as Iowa, for example, the land is very fertile and the weather patterns usually result in high productivity. In such areas of high productivity per acre, farm sizes are relatively small and rural farm populations relatively large. These areas usually support a diverse range of nonagricultural activities. In the Northern Great Plains, by contrast, the land and weather are less conducive to consistently high levels of productivity, resulting in larger farms and sparser rural populations.<sup>10</sup> As seen in Table 2, according to data from the USDA, in 1998 cash receipts per acre for Iowa farms were more than four times those of farms in North Dakota and South Dakota. To compensate for this disparity, the average farm in the Northern Plains is more than four times as large as a farm in Iowa. Nebraska and Kansas in the Southern Plains fall between these extremes, partly because of the effects of irrigation technology.

In summary, rural depopulation trends, although occurring slowly, are important and may be irreversible. The next section examines how rural depopulation trends have affected the performance of insured financial institutions headquartered in declining counties.

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<sup>&</sup>lt;sup>7</sup> Harlow A. Hyde. "Slow Death in the Great Plains." *Atlantic Monthly.* June 1997. p. 45.

<sup>&</sup>lt;sup>9</sup> Mark Drabenstott, Mark Henry, and Lynn Gibson. "Rural Economic Policy Choice." *Economic Review*. Federal Reserve Bank of Kansas City. January 1987. p. 41.

<sup>&</sup>lt;sup>10</sup> Albrecht and Murdock. p. 153.

THE POPULATION STRUCTURE OF THE REGION'S WESTERN STATES DIFFERS CONSIDERABLY FROM THAT OF ITS EASTERN STATES								
WESTERN STATES EASTERN STATES								
	ND	SD	KS	NE	MN	IA	MO	US
POPULATION PER SQUARE MILE	9.3	9.7	32.1	21.6	59.4	51.2	78.9	76.4
Agricultural Cash								
Receipts per Acre (dollars)	76	79	169	194	295	353	162	211
FARM SIZE IN ACRES	1,290	1,418	748	885	354	343	292	487
Percentage of Land in Farms	89%	91%	88%	93%	51%	87%	65%	41%
SOURCE: U.S. CENSUS OF AGRICULTURE, 199	7							-

### Banking Analysis—Rural Depopulation Has Affected Bank Performance

Banking statistics show that institutions located in rural counties with declining populations grew assets, loans, and deposits more slowly in the 1990s than institutions located in counties with increasing populations. Institutions in AD counties reported even slower growth rates. In addition, institutions in declining counties have significantly different loan compositions and funding strategies than institutions in growing counties.

### Types of Institutions in Rural, Nonadjacent Counties

This article examines the performance of "community institutions," which we define as all FDIC-insured institutions with less than \$250 million in total assets as of September 30, 1999.<sup>11</sup> As of that date, there were 189 community institutions in AD counties with total assets of \$8.96 billion, 589 community institutions in Other Declining counties with total assets of \$29.48 billion, and 347 community institutions in Growing counties with total assets of \$22.74 billion. In total, rural nonadjacent counties in the Region that have lost population since 1970 (referring to both AD and Other Declining counties) headquarter 778 community institutions with

total assets of \$38.44 billion, plus 12 noncommunity institutions with total assets of \$4.95 billion.

Not surprisingly, because rural depopulation has largely been driven by consolidation in the agricultural sector, a large percentage of community institutions in AD and Other Declining counties are farm banks.<sup>12</sup> In fact, as shown in Table 3 (next page), over 86 percent of community institutions in AD and Other Declining counties are farm banks. In Growing counties, which are far less dependent on agriculture than declining counties, just over half of community institutions are farm banks. Community institutions in AD and Other Declining counties also have a greater concentration in farm lending13 than do institutions in Growing counties. AD county institutions show the highest aggregate level of farm loan concentrations (46.6 percent), and many institutions in these counties have much higher concentrations than the aggregate figure.

### Growth

Because declining population means dwindling bases of potential borrowers and depositors, growth rates<sup>14</sup> for total assets, loans, and deposits in AD and Declining county institutions have been lower than in Growing county institutions. This disparity in total asset growth rates can be seen in Chart 2 (next page). Not surprisingly, AD county community institutions showed the lowest cumulative asset growth of 42.7 percent over the decade, or 3.7 percent annually. Other Declining county commu-

<sup>&</sup>lt;sup>11</sup> In looking at banking activity in the Region's rural, nonadjacent counties, it is important to examine institutions that conduct a majority of business in the counties in which they are headquartered. Otherwise, institutions' reported results, which are shown entirely as occurring in their headquarters' counties, may reflect economic activity was centered in institutions' home counties, branch data as of June 30, 1998 (the most recent branch data available) were examined. The 1,125 institutions with less than \$250 million in assets in the Region's rural, nonadjacent counties had 76.4 percent of branches in the same county as their headquarters. By contrast, the 35 institutions in those counties with assets of more than \$250 million had 29.1 percent of their branches in the same county as their headquarters.

<sup>&</sup>lt;sup>12</sup> Farm banks are defined by the FDIC as institutions that have farm operating loans or loans secured by farm real estate of over 25 percent of total loans.

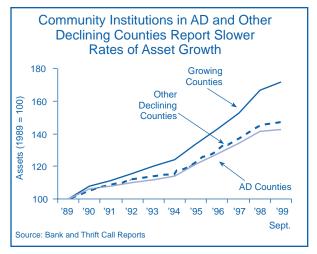
<sup>&</sup>lt;sup>13</sup> Farm loans consist of loans made for agricultural production and loans secured by agricultural real estate.

<sup>&</sup>lt;sup>14</sup> All growth rates cited in this article were computed on a mergeradjusted basis.

	RURAL, NONADJACENT COUNTIES				
AD OTHER DECLINING GROWING COUNTIES COUNTIES COUNTIES					
NUMBER OF COUNTIES	84	209	109		
NUMBER OF COMMUNITY INSTITUTIONS	189	589	347		
NUMBER OF FARM BANKS	163	507	185		
% OF INSTITUTIONS THAT ARE FARM BANKS	86.2%	86.1%	53.3%		
% OF FARM LOANS TO TOTAL LOANS	46.6%	42.1%	26.0%		

SOURCE: BANK AND THRIFT CALL REPORTS, 1999

### CHART 2



nity institutions did not fare much better, growing assets by 46.8 percent over the decade, or 4.0 percent annually. Community institutions in Growing counties reported asset growth of 71.5 percent, or 5.7 percent per year.

Loan growth was similar to total asset growth, but the differences between community institutions in the three county types were not as pronounced. AD county community institutions increased loans by 7.0 percent per year in the 1990s, while Other Declining community institutions increased loans at 7.3 percent. Growing county institutions reported loan growth of 8.1 percent per year.

The three county types are differentiated to a greater degree by the deposit growth rate. Community institu-

tion deposits grew by an annualized rate of just 2.9 percent in AD counties and 3.2 percent in Other Declining counties, while Growing county community institutions grew deposits by 5.0 percent. Deposit growth is addressed in more detail in the funding section of this article.

Going beyond the cumulative 1990s growth figures, in every year this decade community institutions in Growing counties grew assets and deposits to a greater extent than did community institutions in AD counties. In addition, in all but one year during this decade, AD community institutions reported slower loan growth than Growing county institutions.

### Loan Composition

As seen in Table 4, there are key differences in loan composition between institutions in AD counties and Growing counties. Because AD and Other Declining counties are overwhelmingly agricultural, community institutions headquartered there have high concentrations in farm loans. AD county community institutions show even higher concentrations in farm lending than institutions in Other Declining counties. With less dependence on agriculture, institutions in Growing counties report much lower levels of farm loans. Since community institutions in AD and Other Declining counties have higher levels of farm lending than institutions in Growing counties, they have significantly lower levels of other loans. For example, they make significantly fewer single-family residential loans, an important fact because these loans generally carry much less risk than other types of loans. However, they also make fewer commercial real estate loans, which can carry higher levels of risk than other loans.

	% of Total Loans as of 9/30/99				
	COMMUNITY INSTITUTIONS IN:				
Loan Type	AD OTHER DECLINING GROW COUNTIES COUNTIES COUN				
LOANS SECURED BY REAL ESTATE	41.4	46.0	54.5		
CONSTRUCTION/DEVELOPMENT	1.6	1.6	2.6		
COMMERCIAL REAL ESTATE	7.1	8.4	12.7		
1-4-FAMILY RESIDENTIAL	16.9	20.2	28.1		
5+ FAMILY RESIDENTIAL	0.8	0.7	1.3		
Home Equity	0.4	0.6	0.8		
Farmland	14.7	14.6	9.0		
Commercial and Industrial	14.0	14.1	14.6		
Individual	9.5	10.5	12.4		
FARM PRODUCTION	31.9	27.5	17.0		
OTHER LOANS	3.2	1.9	1.5		
TOTAL	100.0	100.0	100.0		

AD and Other Declining county institutions' reliance on agricultural lending results in greater exposure to both long-term and short-term agricultural-sector problems. Prices for the Region's primary commodities-corn, wheat, soybeans, and hogs-are at very low levels and are not expected to improve in the near term. Low prices have resulted in declining farm incomes over the past couple of years, and many farmers, especially those with higherthan-average levels of debt, are experiencing some loan repayment problems. Community institutions in AD counties are reporting the most significant loan quality problems, with an aggregate past-due ratio of 2.9 percent of total loans, with 1.6 percent of total loans being noncurrent. By contrast, community institutions in Growing counties have total past-due loans of just 2.3 percent of total loans, with 1.1 percent of those being noncurrent.

Interestingly, community institutions in Other Declining counties have low levels of problem loans—2.2 percent—even though, like AD counties, they headquarter many farm banks. This disparity probably occurs because 23 of the Region's 84 AD counties are in North Dakota, where farmers are in particularly bad shape because of years of low prices and reduced production. Farm banks in North Dakota as a whole are experiencing the highest aggregate level of past-due loans in the Region.

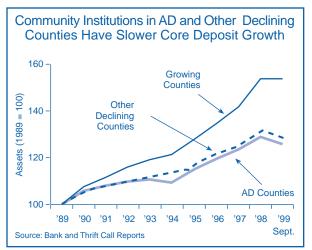
### Funding

Funding, especially regarding growth in core deposits, differs widely among AD, Other Declining, and Growing counties. Core deposits, which are stable funds that include non-interest-bearing, savings, and money market deposit accounts, as well as time deposits of less than \$100,000, have traditionally been the backbone of community institutions' funding.<sup>15</sup> Core deposits are generally less expensive and less sensitive to interest rates than nontraditional funds such as large time deposits, brokered deposits, and Federal Home Loan Bank (FHLB) advances.

Deteriorating depositor bases have caused community institutions in AD and Other Declining counties to report much slower core deposit growth in the 1990s than institutions in Growing counties. Chart 3 (next page) illustrates the disparity in cumulative core deposit growth during this decade. Community institutions in AD and Other Declining counties grew core deposits by just 2.4 and 2.6 percent per year, respectively, while institutions in Growing counties reported

<sup>&</sup>lt;sup>15</sup> Core deposits funded over 80 percent of rural community institutions' assets, regardless of county type, at year-end 1989.

### CHART 3



growth in core deposits of 4.5 percent per year. The low core deposit growth reported by AD and Other Declining county institutions suggests that they did not even retain the accrued interest on core deposits over the past decade.

In response to slower rates of core deposit growth, community institutions in all three county types have developed several strategies. First, as is the case in any prolonged economic expansion, banks liquidated securities and invested the funds in higher yielding loans. Institutions in AD and Other Declining counties (combined) began the decade with a loan-to-asset (LTA) ratio of 46.3 percent and securities-to-assets (STA) ratio of 40.1 percent. By September 30, 1999, these institutions' aggregate LTA ratio had increased to 62.4 percent, while their STA ratio had declined to 29.1 percent. Growing county institutions began the decade with far higher levels of loans and lower levels of total assets, and moderately shifted between securities and loans, reaching LTA and STA ratios of 64.3 and 26.9 percent, respectively.

In addition to liquidating securities portfolios, community institutions increased reliance on nontraditional funds in place of traditional core deposits. Table 5 shows how community institutions in AD, Other Declining, and Growing counties shifted reliance from core deposits to nontraditional funding sources in the 1990s. Of these nontraditional sources, community institutions in all three county types continue to rely heavily on large time deposits, but have increasingly been relying on borrowings during this decade. This trend toward increased reliance on nontraditional funds is consistent among AD, Other Declining, and Growing counties. The difference is that institutions in Growing counties appear to be using nontraditional funds to grow asset bases, while institutions in AD and Other Declining counties are using them without experiencing the same level of asset growth.

Most borrowings reported by community banks refer to advances from the FHLB, and such advances are becoming an integral part of many community institutions' funding strategies. However, until recently commercial banks needed a sizable portfolio of residential mortgage assets to join the FHLB system. As a result, many small banks, including most farm banks, did not qualify to become members. Because of their large farm loan portfolios, only 88 of 189 (46.6 percent) AD county community institutions were members of the FHLB

Community Institutions in Rural Counties, Nonadjacent to MSAs, Are Relying More on Noncore Funding						
	AD COUNTY OTHER DECLINING COMMUNITY COUNTY COMMUNITY INSTITUTIONS INSTITUTIONS					G COUNTY MUNITY TUTIONS
Funding Type as % of Assets	9/99	12/89	9/99	12/89	9/99	12/89
Core Deposits	71.6	81.5	73.0	83.5	72.5	80.9
BROKERED DEPOSITS	0.7	0.0	0.6	0.2	0.7	O. 1
TIME DEPOSITS GREATER						
than \$100,000	10.4	7.5	8.9	5.6	10.1	7.7
OTHER BORROWINGS	6.1	0.8	6.1	0.7	6.6	2.1
Total Noncore Funding	17.2	8.3	15.7	6.5	17.4	9.9
SOURCES: BANK AND THRIFT CALL REPORTS; U	ISDA (FOR CO	UNTY CODES)	-			

TABLE	5
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as of September 30, 1999. On the other hand, community institutions in Other Declining and Growing counties showed FHLB membership of 52.1 and 59.4 percent, respectively.

An analysis of FHLB membership suggests that some community institutions in the Region's rural counties have the opportunity to make more loans but may be constrained by funding-namely, lack of core deposit growth. For example, the FHLB is a primary source of funding for many institutions. However, segmenting banks that are FHLB members from those that are not shows differing growth rates, even among community institutions within each of the three county types. As shown in Table 6, AD county institutions that are not FHLB members grew total assets by 34.5 percent in the 1990s, while AD county institutions that are FHLB members grew assets by 47.4 percent. The difference lies in loan growth: AD county FHLB members outgrew their non-FHLB counterparts 98.0 percent to 81.7 percent. Likewise, Other Declining county FHLB members grew loans much faster than their non-FHLB counterparts. The data indicate that FHLB membership may have enabled some institutions to make more loans and grow asset bases.

### Looking Ahead

The Region's rural depopulation trends may not be reversible. Agricultural consolidation is expected to continue; as a result, many rural areas will continue to see larger farms and lower population levels. AD counties, some of which may have fallen below a critical population level already, are likely to continue to experience significant depopulation. Other Declining counties could also see continued depopulation, and counties that depopulate below the critical point may also see accelerated outflows.

Rural depopulation has affected many of the Region's community banks. Most important, institutions in areas of declining populations have found it difficult to grow asset and core deposit bases. Institutions, particularly those in AD counties, have experienced problems growing loans and core deposits. Given the likelihood of continued population outflows, what does the long term hold for institutions in troubled counties?

First, these institutions will likely experience continued problems growing loans and core deposits, which could be exacerbated if population declines quicken. As farms continue to consolidate, their lending needs will escalate. Since community institutions are constrained by lending limits and prudent loan concentration standards, they may not be able to service these large farms' credit needs. In response, many community institutions are using participation agreements to divide large loans, but at some point large farms may find it cheaper or easier to deal with larger banks or input suppliers in more populated areas. A common and perhaps reasonable response to dwindling borrower bases may be for community institutions to expand their geographic lending areas or expand into new lending products. Such actions could heighten institutions' credit-risk levels if management lacks the expertise to enter new markets or make new types of loans.

FHLB MEMBER COMMUNITY INSTITUTIONS IN DECLINING COUNTIES GREW THEIR ASSETS AND LOANS FASTER THAN NON-FHLB INSTITUTIONS							
	Community Institution Growth in 1990s (%)						
FHLB MEMBER?/COUNTY TYPE	Assets	LOANS	DEPOSITS	CORE DEPOSITS			
YES / Accelerating Declining	47.4	98.0	33.6	27.0			
NO / ACCELERATING DECLINING	34.5	81.7	29.3	23.3			
YES / OTHER DECLINING	55.2	107.7	41.1	33.5			
NO / OTHER DECLINING	32.0	81.4	25.5	20.4			
YES / GROWING	69.8	112.1	57.1	48.7			
NO / GROWING	76.0	119.5	71.5	66.2			
NOTE: GROWTH RATES ARE MERGER ADJUSTED SOURCES: BANK AND THRIFT CALL REPORTS; F			<b>)</b> /99.	1			

### TABLE 6

In addition, most institutions in areas of declining population are likely to have trouble growing core deposits into the future. Core deposit levels are driven by local depositor bases, and as these bases shrink, so may core deposits. As a result, community institutions in counties with declining populations likely will continue to increase their reliance on nontraditional funding sources. For example, institutions may turn to the FHLB for longterm funding or try to attract large time deposits through an active money desk operation or an Internet site. At least in the short term, demand for FHLB advances may increase significantly as a result of the enactment of the Gramm-Leach-Bliley Act. This legislation, signed by President Clinton on November 12, 1999, will enable most banks to join the FHLB system, eliminating prior restrictions based on the size of institutions' residential mortgage loan portfolios. In addition, the Act allows farm loans and small business loans to be used as collateral for advances in addition to residential mortgage loans. These changes, at least in the short term, should alleviate some of the funding constraints many community institutions are experiencing. In the long term, a continued shift into nontraditional funding could pose greater risk to earnings through higher rates paid and could require more active management of interest rate and liquidity risks if such funds are unstable.<sup>16</sup>

Perhaps the long-term result of depopulation in the Region is that the banking industry in rural areas will consolidate. This consolidation could result in institutions in counties of declining population becoming small branches of institutions in more economically robust counties. However, it is also possible that institutions in these areas will increase the level of risk in their loan portfolios or funding strategies.

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<sup>&</sup>lt;sup>16</sup> For a detailed discussion of these risks, refer to "Shifting Funding Trends Pose Challenges for Community Banks," *Regional Outlook*, third quarter 1999.

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