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

Regional Perspectives

◆ Although the San Francisco Region experienced tight labor markets in many urban areas and economic weakness in some states, the Region’s nonfarm employment growth through October 1999 continued to outpace the nation’s growth. See page 18.

◆ The Region’s insured financial institutions reported strong earnings, credit quality, and capitalization during third-quarter 1999, although earnings growth slowed. See page 20.

◆ Insured financial institutions have entered the Region’s higher-growth urban areas at an increasing rate through mergers and acquisitions and de novo chartering. Currently, the number of institutions in the Region that have not weathered an economic downturn is at the highest point in the past decade. See page 21.

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

- **Atlanta Region** (AL, FL, GA, NC, SC, VA, WV)
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In Focus This Quarter

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 indebtedness on corporate balance sheets has expanded rapidly. 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 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). 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.  

2 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 double-digit 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. 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. 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 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. In dollar terms, this level of noncurrent loans is 30 percent higher than one year earlier.

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3 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. 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.\(^6\)

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.”\(^7\) 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.\(^8\) This study shows a significant increase in the number of loan amendments 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.\(^9\) 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.\(^10\)

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\(^6\) The annual interagency process reviews commercial loans over $20 million that are shared by three or more participants.


\(^9\) “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.


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. 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. 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 $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. New 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.

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

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14 “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 speculative-grade 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.\footnote{LPC Gold Sheets. January 10, 2000.}

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. \textit{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).\footnote{Moody’s January 2000 Commentary. January 18, 2000.} 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.\footnote{“Refunding Risk for Speculative Grade Borrowers.” Moody’s Special Comment. Moody’s Investors Service. December 15, 1999.} Furthermore, almost 50 percent of the issuers that defaulted during the year ending September 1999 were rated for three years or less.\footnote{“Default Rate Pendulum.” October 18, 1999.} 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 bond defaults in 1999.\footnote{Moody’s January 2000 Commentary. January 18, 2000.} 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. \textit{Paine Webber} analysts estimate that leveraged lending accounts for over 80 percent of syndicated loan fees and profits earned by loan underwriters.\footnote{“The Biggest Secret of Wall Street.” Paine Webber Equity Research. May 14, 1999.} Highly leveraged lending increased to a new record of $190 billion in 1999.\footnote{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.} 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.

### Chart 5
The Composition of the Rated Bond Market Has Shifted toward the Lower Part of the Speculative-Grade Issues

<table>
<thead>
<tr>
<th>Rating</th>
<th>January 1998</th>
<th>January 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaa</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aa1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Aa2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Aa3</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>A1</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>A2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>A3</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Baa1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Baa2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Baa3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Ba1</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Ba2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Ba3</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>B1</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>B2</td>
<td>15</td>
<td>15</td>
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<tr>
<td>B3</td>
<td>17</td>
<td>17</td>
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<td>Caa2</td>
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<td>23</td>
</tr>
<tr>
<td>Ca</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>C</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

Note: Unrated issues of corporate debt fall below the speculative-grade “C” rating. Source: Moody’s Investors Service
In Focus This Quarter

**CHART 6**

Loans to Leveraged Companies Represent a Greater Portion of Syndicated Loans
Originations of Syndicated Loans to Leveraged Companies

<table>
<thead>
<tr>
<th>Year</th>
<th>$ Billions</th>
<th>As a Percentage of Total Syndicated Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>'90</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>'91</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>'92</td>
<td>200</td>
<td>20%</td>
</tr>
<tr>
<td>'93</td>
<td>300</td>
<td>30%</td>
</tr>
<tr>
<td>'94</td>
<td>400</td>
<td>40%</td>
</tr>
<tr>
<td>'95</td>
<td>300</td>
<td>30%</td>
</tr>
<tr>
<td>'96</td>
<td>200</td>
<td>20%</td>
</tr>
<tr>
<td>'97</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>'98</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>'99</td>
<td>400</td>
<td>40%</td>
</tr>
</tbody>
</table>

Note: 1999 data are annualized based on 3Q99 data. Source: Loan Pricing Corporation

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. 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. 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.

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™ (EDF™) analysis. KMV Corporation® has developed a proprietary method of measuring the degree of credit risk inherent in corporate borrowers by calculating an EDF™ score to estimate the probability that a firm will default on its obligations within one year. 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 risk.

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25 KMV’s® proprietary calculation for EDF™ is based on (1) the current market value of the firm, (2) the structure of the firm’s current obligations, and (3) the vulnerability of the firm to large changes in market value. Multiplying industry originations by median industry EDF™ 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.

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 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. 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. 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 percent of the volume of the U.S. high-yield bond market.

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27 “Internet Indicators.” The Center for Research in Electronic Commerce at the University of Texas Graduate School of Business. October 27, 1999.

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.

**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 Sotheron, Senior Financial Analyst
Alan Deaton, Economic Analyst*

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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.
# Table 1

<table>
<thead>
<tr>
<th></th>
<th>Dollar Value* (1998, $ millions)</th>
<th>Percent of Total</th>
<th>1999 Growth**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exports</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise</td>
<td>682,138</td>
<td>73.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Agriculture and Related Commodities</td>
<td>26,603</td>
<td>2.8%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Mineral Commodities</td>
<td>6,644</td>
<td>0.7%</td>
<td>-17.4%</td>
</tr>
<tr>
<td>Manufactured Goods</td>
<td>593,297</td>
<td>63.5%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Other Merchandise</td>
<td>55,593</td>
<td>6.0%</td>
<td>39.5%</td>
</tr>
<tr>
<td>Services</td>
<td>263,662</td>
<td>28.2%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Travel</td>
<td>71,250</td>
<td>7.6%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Passenger Fares</td>
<td>19,996</td>
<td>2.1%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Royalties and License Fees</td>
<td>36,807</td>
<td>3.9%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Freight and Port Services</td>
<td>25,520</td>
<td>2.7%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Other Services</td>
<td>110,089</td>
<td>11.8%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Adjustments***</td>
<td>(11,890)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td>907,647</td>
<td>82.6%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Merchandise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture and Related Commodities</td>
<td>22,859</td>
<td>2.1%</td>
<td>-2.2%</td>
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<tr>
<td>Mineral Commodities</td>
<td>38,619</td>
<td>3.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Manufactured Goods</td>
<td>803,384</td>
<td>73.2%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Other Merchandise</td>
<td>42,786</td>
<td>3.9%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Services</td>
<td>181,015</td>
<td>16.5%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Travel</td>
<td>56,105</td>
<td>5.1%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Passenger Fares</td>
<td>19,797</td>
<td>1.8%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Royalties and License Fees</td>
<td>11,293</td>
<td>1.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Freight and Port Services</td>
<td>30,460</td>
<td>2.8%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Other Services</td>
<td>63,360</td>
<td>5.8%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Adjustments***</td>
<td>9,531</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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.\(^1\)

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 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.\(^2\)

**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

\(^1\) Weak import prices are a factor cited by analysts to explain the benign performance of U.S. inflation during the past few years.

\(^2\) 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.\(^3\)

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 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...
**In Focus This Quarter**

**Table 2**

<table>
<thead>
<tr>
<th>Industry Exposure to International Trade</th>
<th>Import Share of U.S. Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Export Share of U.S. Production</strong></td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>PRINTING AND PUBLISHING</td>
</tr>
<tr>
<td></td>
<td>FOOD PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>NONMETALLIC MINERALS,</td>
</tr>
<tr>
<td></td>
<td>EXCEPT FUELS</td>
</tr>
<tr>
<td></td>
<td>FABRICATED METAL PRODUCTS</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>COAL MINING</td>
</tr>
<tr>
<td></td>
<td>TOBACCO PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>NONMETALLIC MINERALS,</td>
</tr>
<tr>
<td></td>
<td>EXCEPT FUELS</td>
</tr>
<tr>
<td></td>
<td>FABRICATED METAL PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>FARM PRODUCTS</td>
</tr>
<tr>
<td>HIGH</td>
<td>CHEMICALS AND ALLIED</td>
</tr>
<tr>
<td></td>
<td>PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>INSTRUMENTS AND RELATED PRODUCTS</td>
</tr>
</tbody>
</table>

**Highly Exposed Industries**

**Moderately Exposed Industries**

**Less Exposed Industries**

summarizes the results of the assessment. 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. 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.

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4 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.

1 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. 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.

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. Among the 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. 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.

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.

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4 Breakpoints for the distribution of industries by import share of consumption were as follows: Low: less than 9 percent; High: greater than 25 percent.

7 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.

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).

8 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.

9 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
Regional Perspectives

Although the San Francisco Region experienced tight labor markets in many urban areas and economic weakness in some states, the Region’s nonfarm employment growth through October 1999 continued to outpace the nation’s growth.

The Region’s insured financial institutions reported strong earnings, credit quality, and capitalization during third-quarter 1999, although earnings growth slowed.

Insured financial institutions have entered the Region’s higher-growth urban areas at an increasing rate through mergers and acquisitions and de novo chartering. Currently, the number of institutions in the Region that have not weathered an economic downturn is at the highest point in the past decade.

Economic and Banking Conditions

The San Francisco Region’s Economy Remains Strong

The San Francisco Region’s economy continues to outperform the nation’s economy; however, differences in economic and banking conditions between the Region’s rural and urban areas are evident. Per capita personal income levels and in-migration flows are strong in the Region’s urban areas, where high-tech growth has been robust. However, certain rural areas are lagging because of stagnating growth in the agricultural, mining, and logging sectors. Insured financial institutions have entered the Region’s higher-growth urban areas at an increasing rate through mergers and acquisitions and de novo chartering. Currently, the number of institutions in the Region that have not weathered an economic downturn is at the highest point in the past decade.

Despite tight labor markets in many urban areas and weakness in some states, the San Francisco Region enjoyed strong economic conditions through October 1999. Strength in the services sector resulted in robust employment growth in Nevada, Arizona, and California. However, softness was evident in the economies of Washington, Oregon, Alaska, parts of Montana, and Hawaii. Employment growth rates in Washington and Oregon declined because of slowing in the aerospace industry and lingering weakness in the Asian export markets. Alaska continued to feel the effects of consolidation in the oil industry, and areas of eastern Montana also have suffered because of weak agricultural conditions—specifically, lower wheat prices. Although still lagging the Region and nation, Hawaii during third quarter 1999 benefited from improving tourism activity and retail sales. Overall, however, the Region continues to outperform the nation, primarily because of strength in its metropolitan areas.

Urban Areas Outperform Rural Counterparts

The Region’s economic expansion since 1995 has been driven largely by its urban areas, in part because of strong growth in high-tech employment. These urban areas also reported healthy growth in the supporting services and construction sectors. Chart 1 shows those metropolitan statistical areas (MSAs) with concentrations in high-tech manufacturing (San Jose, Sacramento, San Diego, Orange County, Portland, and Boise) that experienced particularly strong total nonfarm employment growth in recent years. In these markets, strong employment growth has been accompanied by high levels of per capita personal income and has attracted higher levels of in-migration.

Large urban centers in Washington, California, and Oregon with concentrations in high-tech employment

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1 The high-tech sector is defined to include Standard Industrial Codes 3570, 3600, and 3800.
2 A de novo institution is one chartered within the previous three years.
3 Urban counties are those areas designated by the Economic Research Service, U.S. Department of Agriculture, as metropolitan counties.

4 In-migration is the total of domestic and international migration.
5 Large urban centers are central counties of metropolitan areas with population exceeding 1 million people, as reported by the Economic Research Service, U.S. Department of Agriculture (USDA).
posted particularly high levels of per capita personal income, as shown in Chart 2. For example, the presence of Boeing and Microsoft in and around Seattle likely contributed to the highest average per capita personal income in the Region in 1997—over $30,000. Large urban centers with concentrations of high-tech employment in California and Oregon followed closely, reporting average per capita personal income just under $30,000. Although high tech has driven growth in the Region’s large urban areas, smaller urban centers in Alaska, Hawaii, and Nevada also reported relatively high levels of per capita personal income. While the relatively isolated locations and high costs of doing business in Alaska and Hawaii help explain these states’ levels of urban (and rural) per capita personal income, Alaska also benefits from oil revenues. In addition, Nevada’s smaller urban centers have prospered because of the increased popularity of tourism and gaming attractions.

Robust employment opportunities resulted in rapid in-migration to many of the Region’s urban areas. For example, growth in the high-tech and tourism and gaming sectors drove in-migration in Nevada, California, Arizona, Washington, and Oregon (see Chart 3).

Agricultural-Sector Weakness and Volatility in the Lumber, Mining, and Oil Industries Slowed the Region’s Rural Economies

Many of the Region’s rural economies have not kept pace with the vigorous growth in urban areas, particularly those areas concentrated in the agricultural industry. Map 1 (next page) shows that employment in the Region’s rural areas is generally concentrated in one of four industries: agriculture, lumber, mining, or oil and gas. As explained in the San Francisco Regional Outlook, Fourth Quarter 1999, the agricultural sector has recently experienced declining commodity prices for some of the Region’s most important crops, resulting in lower levels of operating income and continued farm consolidation. The lumber, mining, and oil and gas industries have also experienced periods of weak commodity prices, though oil and gas prices have recovered.

* Chart 1

**High-Tech-Dependent MSAs Report Strong Employment Growth**

<table>
<thead>
<tr>
<th>Nonfarm Employment Growth Rate (percent)</th>
<th>Concentration of High-Tech Employment (Left Axis)</th>
<th>Average Total Nonfarm Employment Growth 1995–98 (Right Axis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>70</td>
<td>50</td>
<td>40</td>
</tr>
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<td>60</td>
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<td>40</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>30</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

* High-tech manufacturing is defined to include Standard Industrial Codes 3570, 3600, and 3800.

Source: Bureau of Labor Statistics via Haver Analytics

* Chart 2

**The San Francisco Region’s Urban Areas Have Higher Per Capita Personal Income than Rural Areas**

Per Capita Personal Income

- $35,000
- $30,000
- $25,000
- $20,000
- $15,000
- $10,000
- $5,000
- $0

Source: Census Bureau; 1997 data

* Chart 3

**In-Migration to Urban Areas Exceeded Rate in Rural Areas in Six States in Region between 1995 and 1998**

Number of People

- 250,000
- 200,000
- 150,000
- 100,000
- 50,000
- 0

Source: Census Bureau (estimates released March 1999: sum of domestic and international migration)

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4 The most recent per capita personal income data available at a county level are for 1997.

5 Smaller urban centers include fringe counties of large urban centers and metropolitan areas with population between 250 thousand and 1 million, as reported by the Economic Research Service, USDA.

6 Rural counties are those designated by the Economic Research Service, USDA, as nonmetropolitan counties.
The Region’s rural areas, particularly those that rely on agriculture, also report lower per capita personal income and in-migration levels. In the Region’s most important agricultural states (Montana, Idaho, Oregon, Washington, and California), rural areas reported per capita personal income below $20,000 in 1997. In each state, this income level was lower than in metropolitan areas; in fact, in Washington, California, and Oregon, the gap neared $10,000. In contrast, rural areas in Alaska, Nevada, and Wyoming that are not dependent on agriculture reported relatively higher levels of per capita personal income. These higher levels can be attributed in part to the concentration of higher-paying mining and oil and gas employment. Nevertheless, every state in the Region reported higher average per capita income in urban areas. Weakness in rural per capita personal income has also resulted in migration to urban areas from 1995 through 1998.

Low agricultural commodity prices and farm consolidation in the Region, in addition to weakness in the lumber, mining, and oil industries, likely contributed to out-migration. For example, Chart 3 indicates that rural areas in Alaska and Wyoming have experienced net out-migration.

Weaknesses in the Region’s rural economies are evident in the asset quality measures reported by rural banks compared with urban banks. As of September 30, 1999, rural banks reported a much higher median past-due ratio—about 40 basis points—than their urban counterparts, primarily because rural banks have higher levels of agricultural loan exposures (see Table 1). For example, Montana’s rural agricultural banks report a high 3.13 percent past-due ratio, while urban banks as a group are experiencing strong asset quality.

The Region’s insured financial institutions report strong earnings, credit quality, and capitalization, despite weaker credit quality in some rural areas. Financial institutions reported a return on assets (ROA) of 1.38 percent as of third quarter 1999, higher than the nation’s 1.27 percent. Continued improvements in non-interest income and provision expenses drove earnings higher for the third consecutive quarter. In addition, net interest margins, which were gradually declining in the Region from late 1997 until mid-1999, have stabilized. Improving credit quality, as evidenced by the third consecutive quarter of declines in the net charge-off rate and past-due loan ratio, has made reductions in provision expenses possible. Capital ratios also have remained strong but relatively stable despite robust earnings. This stability is likely due to increases in dividend payments and stock buyback programs.

Although the Region’s insured financial institutions have been reporting excellent earnings, the growth in ROA has begun to slow in recent quarters. Fee income gains and overhead expense savings, which were major contributors to earnings growth from 1994 through 1998, are declining. In addition, the increasing numbers of de novo institutions are beginning to adversely affect aggregate earnings performance in the Region. While the Region’s rate of earnings growth may be slowing, many insured institutions continue to find its metropolitan banking markets attractive and are entering these markets through either mergers and acquisitions (M&As) or de novo chartering.

### Notes

7 Rural banks are not headquartered in a metropolitan statistical area; urban banks are located in a metropolitan statistical area.
Heightened M&A activity as well as increasing numbers of de novo institutions have materially altered the San Francisco Region’s banking landscape over the past decade. The Region began 1991 with 1,254 charters, but as of September 30, 1999, this number had declined to 847. This decline was attributed to institution failures and relocations, and 505 charters were eliminated through M&A and consolidation. New institutions, however, have partially offset this decline. For example, 114 de novo institutions are currently operating in the San Francisco Region, the highest number since year-end 1990. In fact, de novo charters as a percentage of total charters are higher than at any time during the past decade.

Despite the large number of de novo charters, the Region’s total banking assets declined by about 16 percent from September 1998 to September 1999, largely because of acquisitions of institutions headquartered within the Region by institutions headquartered outside the Region. The majority of the recent M&A activity has been out-of-market M&A, as opposed to in-market M&A (see Chart 4). An in-market M&A is characterized by significant deposit franchise overlap; these types of mergers generally are executed to contain costs and enhance revenues by eliminating a significant competitor in the marketplace. An out-of-market M&A exhibits little deposit franchise overlap; cost savings, while important, are not as crucial as entering a new market, expanding revenues, and increasing market share. Although an out-of-market M&A is much like a de novo charter in that both are a means of entering a new banking market, the factors influencing the type of entry differ.

**Factors Contributing to High Levels of De Novo and Out-of-Market M&A Activity**

Increased out-of-market M&A and de novo bank chartering activity during the 1990s can be attributed to several factors, including liberalized branching laws, favorable interest rates, excellent bank earnings performance, and strong equity markets, as well as robust
economic conditions in the San Francisco Region (see Chart 5). The 1994 Riegle-Neal Interstate Banking and Branching Act removed many barriers to interstate banking. In addition, from 1994 through 1998, interest rates remained fairly low, bank earnings grew, and bank stock prices increased. As a result, institutions’ cost of capital declined, helping to lower barriers to entry. Strong economic growth in the San Francisco Region also played an important role in promoting entry into the Region.

The level of economic growth, particularly in urban areas, appears to be one of the most important factors influencing institutions’ decisions to enter the Region’s banking market. The 11 markets that have experienced the highest level of de novo entry or out-of-area M&A in the past three years also are characterized by robust employment growth. Los Angeles, where entry has been low relative to the number of institutions in the market, is the exception, reporting relatively low employment growth (see Table 2). Conversely, urban markets with no de novo or out-of-area M&As, shown in Table 3, have posted sluggish economic growth figures. The Region’s rural areas also have experienced low levels of de novo and M&A activity, likely because of slower economic growth.11

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11 Also refer to Steven A. Seelig and Timothy Critchfield, “Determinants of De Novo Entry in Banking,” FDIC, Division of Research and Statistics, 1999.
Out-of-market M&A was a more popular form of entry than de novo chartering in several of the Region’s metropolitan markets, particularly those with strong employment growth and low market concentration. Examples include the Los Angeles-Long Beach, Orange County, Riverside-San Bernardino, San Francisco, Sacramento, and San Diego MSAs. Most of these markets are characterized by generally strong employment growth and relatively low market concentrations and are home to many institutions that have been operating for more than five years—“qualified state-chartered institutions.”

Chart 6 shows that, except for the San Diego market, most of California’s banking markets with low market concentrations tend to have lower acquisition premiums. The San Diego market, which has had a disproportionate number of out-of-market M&A transactions given its size, has been characterized by low market concentration and high acquisition premiums. Four San Diego County institutions sold for an average of 3.75 times book, well above premiums paid for other institutions in California and the nation. The strength of the Southern California economy, the lack of “attractively priced” targets in that market, and the desirability of the institutions acquired also have contributed to high acquisition prices.

From 1994 to 1998, de novo activity was a popular form of entering the Las Vegas, Phoenix-Mesa, Salt Lake City-Ogden, Seattle-Bellevue, and Portland-Vancouver MSAs. While each of these markets experienced relatively strong employment growth, they also tended to be more dominated by a few institutions compared with other MSAs in the Region (see Table 2). Market concentration is a key factor here because as the level of concentration increases, acquisition costs for out-of-market M&As also rise (see Chart 6).

In addition to high market concentrations, state banking laws appear to have played an important role in the level of de novo activity in these MSAs. For example, a limited number of locally owned “qualified state-chartered banks” were available for acquisition in the Las Vegas and Phoenix MSAs (4 and 3, respectively); these low numbers may have skewed entry toward de novo char-
tering in these markets. Similarly, Utah offers an industrial loan company (ILC) charter that is attractive to industrial corporations that want to offer consumer credit nationwide. This charter, which allows industrial corporations access to insured deposits, in addition to Utah’s liberal consumer credit laws, makes Salt Lake City an ideal location to headquarter these corporations’ consumer credit operations. As of September 30, 1999, more than 70 percent of Salt Lake City’s de novo institutions were ILCs.

The Risks of Entering New Banking Markets

Some of the risks posed by out-of-market M&A (noted in “Risks and Challenges for Consolidating Institutions,” Regional Outlook, Fourth Quarter 1998) include melding different corporate cultures, integrating technology, and meeting earnings estimates. For example, meeting earnings goals has been increasingly difficult for institutions involved in large mergers. A recent study noted that only 2 of 15 banking companies that made large acquisitions in 1997 or 1998 met 1999 earnings targets. Consequently, the majority of these 15 institutions have experienced declines in share price, which can increase an institution’s cost of capital and force it to adopt a more aggressive business plan to meet return goals. Compounding these risks in an out-of-market M&A is the fact that management may be unfamiliar with the nuances of new markets, making it difficult to meet expectations.

The high level of out-of-market M&A and de novo chartering in the Region between 1994 and 1999 has left the Region with a greater percentage of newly organized institutions. The record numbers of de novo institutions entering urban markets have done so at one of the most favorable times in recent economic history, given the economy’s strong growth, low inflation, and low unemployment, as well as strong stock and real estate markets. In addition to de novo institutions, many other institutions in the Region have been in operation between 4 and 14 years; we refer to them as “unseasoned institutions.” In fact, the percentage of the Region’s assets controlled by de novo and unseasoned institutions has reached the highest point in the decade. Of concern is how these institutions would perform should a recession occur.

A study conducted by the Federal Reserve Bank of Chicago provides some insight into how de novo and unseasoned institutions may perform during an economic downturn. The study notes that unseasoned institutions failed at twice the rate of established institutions. De novos tend to grow rapidly during the first three years of existence, but earnings do not reach maturity until about year ten of operation. The study also found that problem assets begin to accelerate in the early years of growth. These factors tend to make unseasoned institutions more vulnerable to adverse economic conditions.

The Region’s experience during the previous recession tracks with this study’s findings. During the past ten years, the San Francisco Region experienced 67 commercial bank failures; more than 76 percent of these failures were unseasoned institutions. In addition, most of these institutions were headquartered in Southern California and Arizona, areas that suffered a severe recession and devaluation in real estate. These institutions also reported significant concentrations of commercial real estate assets, particularly construction and land development loans.

Chart 7

De Novos Offset Higher Cost of Funds with More Higher-Yielding Assets

<table>
<thead>
<tr>
<th>Year</th>
<th>Median CRE/TA De Novo Institutions</th>
<th>Median CRE/TA Seasoned Institutions</th>
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<tr>
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<tr>
<td>'98</td>
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</table>

Source: Bank and Thrift Call Reports

19 An unseasoned institution has been in operation between 4 and 14 years.
20 DeYoung, Robert, “Birth, Growth, and Life or Death of Newly Chartered Banks,” FRB Chicago Economic Perspectives, Third Quarter 1999.
The group of recently chartered institutions in the Region appears less diversified than more established institutions. Chart 7 shows that the Region's de novo institutions have greater exposure to commercial real estate loans and a higher cost of funds than established institutions. In addition, de novo institutions depend slightly more on volatile funding sources than do established institutions. Furthermore, the earnings performance of the Region's de novo institutions has been trending downward: The median ROA for de novo institutions in the second year of existence has been falling over the past several years. These negative trends could heighten these institutions’ risk profiles should an economic downturn occur.

19 Established institutions are those that have been in operation for more than 14 years.

Conclusion

De novo chartering and M&A activity have resulted in a higher concentration of assets held by de novo and unseasoned institutions in the Region than at any other time in the past decade. De novo and unseasoned institutions tend to be more vulnerable to adverse economic events than more seasoned institutions, and the fact that the majority of these institutions have not weathered an economic downturn is a concern.

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