Regional Outlook

FEDERAL DEPOSIT INSURANCE CORPORATION — THIRD QUARTER 2000

FDIC
BOSTON
REGION

DIVISION OF INSURANCE

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Regional Perspectives

◆ ***Region's Economic and Banking Conditions*—Overall job growth remained steady in the Boston Region during the first half of 2000, while the increase in per capita income in 1999 exceeded that for the nation for the fifth consecutive year. The Region's insured institutions continue to report stable conditions. Widespread growth in commercial and industrial and construction and development loans continues.** *See page 3.*

◆ ***Capital Ratios at the Region's Insured Institutions, although High by Historical Standards, Are Declining in Some Sectors, while Some Risk Indicators Have Been Rising*—Declining capital ratios have been most pronounced in publicly held companies. An increasingly higher-risk asset mix is also contributing to declining risk-based capital levels. The trend of declining capital ratios bears watching given that some risk indicators are increasing and new risks are emerging.** *See page 5.*

◆ ***The Region's Economic Link to the Stock Market Generates Benefits and Risks*—Greater Boston and Fairfield County, Connecticut, have benefited meaningfully from a strong stock market, but both could experience a significant deceleration in growth should capital markets enter a protracted period of weakness.** *See page 7.*

By the Boston Region Staff

In Focus This Quarter

◆ ***Ranking Metropolitan Areas at Risk for Commercial Real Estate Overbuilding*—Commercial real estate construction has boomed in a number of U.S. metropolitan markets during recent years amid falling vacancy rates and growing demand for new space. Insured depository institutions have reasserted their role as primary sources of capital for this construction boom, particularly in the wake of the 1998 financial markets crisis that left some important market-based lenders on the sidelines. Recent data for some metropolitan areas show that on-balance-sheet exposures of FDIC-insured institutions are by some measures higher now than at the peak of the last commercial real estate cycle during the late 1980s. This article reassesses major U.S. metropolitan real estate markets in search of possible signs of overbuilding that could drive up vacancy rates and drive down rents in the near term. This review points to an underlying trend of markets experiencing more vigorous construction activity across multiple property types.** *See page 11.*

By Thomas A. Murray, Senior Financial Analyst

◆ ***Rising Home Values and New Lending Programs Are Reshaping the Outlook for Residential Real Estate*—Rising home prices and high levels of activity in the single-family housing market have been supported by excellent economic conditions and generally low interest rates. However, as interest rates have begun to rise, housing market activity has slowed. Historically, residential real estate has been one of the best-performing asset classes at insured institutions. Concerns have recently arisen, however, that new, higher-risk lending lines of business could adversely affect the future credit quality of residential real estate portfolios.** *See page 19.*

By Alan Deaton, Financial Economist

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

- **Overall job growth remained steady in the Boston Region during the first half of 2000, while the increase in per capita income in 1999 exceeded that for the nation for the fifth consecutive year.**

- **The Region's insured institutions continue to report stable conditions. Widespread growth in commercial and industrial and construction and development loans continues.**

- **Capital ratios at the Region's insured institutions, although solid by historical standards, are declining, while some risk indicators have been rising and new risks are emerging.**

- **Greater Boston and Fairfield County, Connecticut, have benefited meaningfully from a strong stock market, but both could experience a significant deceleration in growth should capital markets enter a protracted period of weakness.**

Region's Economic and Banking Conditions

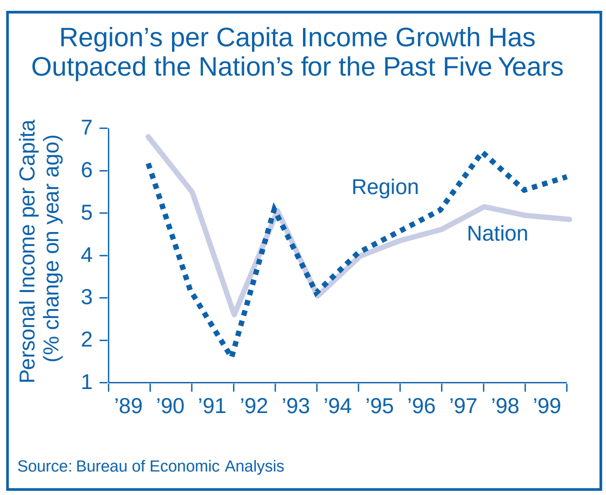
New England Job Growth Remained Solid in Early 2000

The Boston Region continued to experience healthy job growth through the first six months of 2000. The Region's nonfarm employment rose an average of 1.9 percent from year-ago levels, modestly below the nation's 2.3 percent pace. This growth rate equaled the 1999 pace but fell below 1998 levels. During the first half of 2000, New England's manufacturing sector again shed jobs on net, with factory employment dropping an average of 1.2 percent (year-on-year). This rate of decline was slightly more than double the national rate. As was the case during the past two years, the Region's construction sector posted job growth in excess of the nation through mid-2000. The trade and finance/insurance/real estate sectors also narrowly exceeded national growth rates through June, while other sectors lagged.

Labor markets generally continued to tighten across the Region early this year. The Region's seasonally adjusted unemployment rate dropped from 3.1 percent in December 1999 to 2.7 percent by June 2000, compared with 4.0 percent for the nation as of June 2000. Across the Region, seasonally adjusted unemployment rates in June were below 3 percent, except in **Maine** (3.4 percent) and **Rhode Island** (3.9 percent). **Connecticut** reported the Region's lowest unemployment rate (2.3 percent) in June. Midyear unemployment rates were significantly below year-end levels in all states except Rhode Island (unchanged) and **New Hampshire** (higher). While New Hampshire's rising jobless rate can be attributed to a slowing in job growth, Rhode Island's unemployment rate remained essentially unchanged between December and June despite an acceleration in job growth as more persons entered the labor force, filling new job openings.

Per capita income data for 1999 show that New England's growth again exceeded the nation's (see Chart 1). Except for the past recession, income growth in the Region has typically surpassed that of the nation. Trends in the Region's income (as in many of its other economic indicators) are driven by its two most populous states, **Massachusetts** and Connecticut. Although these states' job growth has generally lagged the nation's because of demographic constraints and greater business operating costs, concentrations in well-paying industries and professions (and a higher cost of living)

Chart 1



typically have resulted in favorable income comparisons with the nation, particularly during the "Massachusetts Miracle" period in the 1980s. More recently, the rapid rise in U.S. equity prices since 1995 has benefited income growth in these two states, given concentrations of employment in the securities and information technology industries, as well as higher average household holdings of financial assets. In 1989, before the last recession, the Region's per capita income reached a peak of 120 percent of the national level. After falling to less than 116 percent in 1992, this ratio increased to 119 percent by 1999. While Connecticut's per capita income relative to the nation is still modestly below its 1990 peak, the ratio of state to U.S. per capita income in Massachusetts is now the highest in 20 years.

Banks Report Stable Conditions: Modest Core Deposit Runoff and Thinning of Margins Continue

The Region's insured institutions continue to report stable conditions (see Table 1). Excluding credit card specialists, the aggregate return on assets for the Region was 1.29 in first quarter 2000, an increase of 7 basis points from the prior year. Net interest margins of the Region's larger institutions (those with assets greater than $1 billion) continued to decline, while margins at the smaller institutions remained relatively flat. Some signs of weakening have emerged, as the aggregate past-due loan and net charge-off ratios rose slightly as a result of increases in the larger commercial institutions' commercial and industrial (C&I) portfolios. However, the past-due ratio continued to fall in the Region's smaller institutions and remains low in aggregate compared to that of the nation.

Core deposits as a percentage of assets continued to decline for all asset categories in the Region's insured institutions. In the wake of increased competition for traditional deposits, institutions are relying more on noncore sources of funding to support loan growth. The use of noncore funding has been steadily increasing to offset slow deposit growth, as total loan growth outpaced core deposit growth in the Region by an average of 4 percent over the past four years. This growth in borrowings has been used to fund growth in traditionally riskier types of loans.

C&I lending continues to be brisk and widespread, with a median increase of 15 percent for the year ending March 31, 1999, and 19 percent for the 12 months ending March 31, 2000. Construction and development (C&D) loans have increased throughout the Region as well, with median growth rates of 15 percent (year ended March 31, 1999) and 18 percent (year ended March 31, 2000). Concentration levels of C&D loans as a percentage of total assets have increased slightly, as have delinquency rates, but remain low compared with peak levels witnessed in the early 1990s. Such concentration levels bear monitoring, as C&D loans have traditionally been a risky segment of the loan portfolio.

Table 1

Financial Performance at Insured Institutions Remains Solid

	Boston Region*			<$1 billion*			>$1 billion <$25 billion*			>$25 billion*		
	March			March			March			March		
	'00	'99	'98	'00	'99	'98	'00	'99	'98	'00	'99	'98
Return on Assets (ROA)	1.29	1.22	1.23	1.09	1.06	1.11	1.19	1.05	1.13	1.39	1.34	1.31
Net Interest Margin (NIM)	3.79	3.86	3.90	3.92	3.78	4.00	3.50	3.55	3.62	3.83	4.00	3.95
Past-Due Ratio	1.69	1.63	1.82	1.41	1.77	2.20	1.18	1.55	1.80	2.02	1.60	1.67
Net Charge-off Ratio	0.50	0.38	0.48	0.08	0.04	0.07	0.19	0.23	0.27	0.81	0.57	0.74
Core Deposits/ Assets	48.80	51.70	55.21	69.97	71.49	73.80	59.55	62.80	63.78	37.50	40.84	45.56
Noncore Funding/Assets	38.15	35.85	33.55	18.95	16.93	14.55	31.38	27.66	27.05	47.44	45.45	42.65

* All data exclude credit card institutions.
Source: Bank and Thrift Call Reports; reported on a merger-adjusted basis

Current Trends in Capital Merit Watching

Many Insured Institutions Are Reducing Capital Ratios while Other Indicators of Risk Have Been Rising and New Risks Are Emerging

The Region's insured institutions report relatively high levels of capital; however, aggregate capital ratios have been declining. As of first quarter 2000, the aggregate Tier 1 leverage ratio was 7.31 percent, 62 basis points lower than the 7.93 reported in first quarter 1996 (see Chart 2). In addition, over the same period, the aggregate Tier 1 risk-based capital ratio of 9.62 percent and the total risk-based capital ratio of 12.44 percent fell by 196 and 111 basis points, respectively. The trend of declining capital ratios bears watching, given that some risk indicators are increasing and new risks are emerging.

One indicator of heightened credit risk is the increase in the ratio of risk-weighted assets[1] to assets (see Chart 2). Generally, risk-weighted assets are calculated by discounting categories of assets and credit equivalent amounts of off-balance-sheet items according to their perceived risk of loss. Therefore, a higher ratio is theoretically indicative of greater credit risk.

Two factors appear to contribute to the higher level of risk-weighted assets. First, the mix of assets that insured institutions maintain on the balance sheet is shifting. Residential loans, perceived to have lower credit risk, have diminished in size as a percentage of the total loan portfolio. As shown in Chart 3, growth in residential loans has been slow in comparison to higher-risk loans. In addition, concentrations in U.S. Treasuries and government agency securities, which are significantly discounted because of their low credit risk, are declining. In the first quarter of 2000, U.S. Treasury and government agency securities were 13 percent of total assets, versus 20 percent six years earlier.

CHART 2

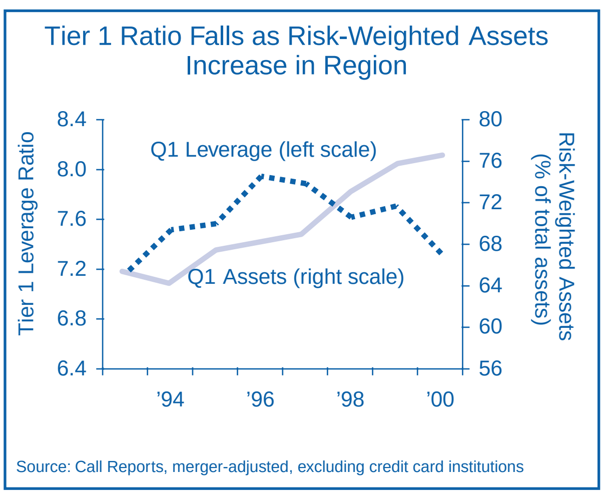
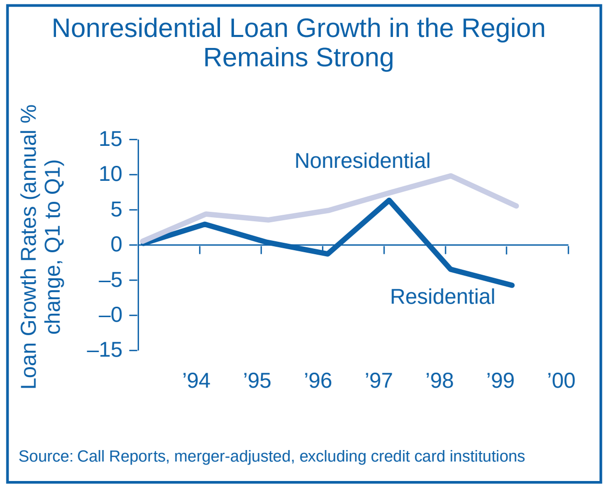


CHART 3



The second factor that may have increased risk-weighted assets is the growth in off-balance-sheet items. Unfunded commitments, other than credit card, were 386 percent of Tier 1 capital as of March 31, 2000, versus 244 percent as of March 31, 1993. This increase in commitments may expose institutions to greater risk in the event of a downturn in the economy, as borrowers will likely use more of their unfunded lines.

Increasing levels of asset securitization may also be adding to the level of credit risk. Asset securitization often results in the highest-quality loans being sold, leaving an insured institution with relatively lower-quality assets on the balance sheet. Should the economy turn downward, losses on these loans would be more likely to increase. In general, the Region's credit risk profile appears to have risen.

The ability to strengthen capital may also be limited as a result of earnings declines caused by lower net interest margins. In recent years, interest rate risk at many insured institutions has risen. Owing to the shape of the yield curve, borrowers have been seeking long-term, fixed-rate credit, while depositors remain partial to short-term instruments. As a result, many insured

[1] A detailed description of the methodology used to calculate risk-weighted assets is in Appendix A of Part 325 of FDIC Rules and Regulations.

institutions have seen a widening mismatch of maturities between assets and liabilities. The widening of maturities may cause interest expense to rise more rapidly than interest income if interest rates rise (see ***Regional Perspectives,*** second quarter 2000).

Some advancements in technology may also jeopardize earnings. The advent of the Internet has intensified local competition, as consumers have more opportunity to "shop" rates for loans and deposits or conduct business beyond local markets. The increased competition could place additional pressure on margins, as insured institutions may be forced to raise deposit rates while lowering loan rates. Lower margins arising from higher interest rates or greater competition may decrease earnings and restrain future capital growth.

New regulations may also affect the amount of capital a bank should hold. Under current prompt corrective action rules, an insured institution with a tangible equity-to-asset ratio of 2 percent or less can be closed. Before these rules were implemented in 1991, in order for an insured institution to be closed, the equity-to-asset ratio had to be less than zero percent. Consequently, the amount of capital cushion available to banks to prevent closure has been reduced.

Besides capital, other funds available to cover losses are also diminishing. "Hidden" capital in the form of tax loss carrybacks has been greatly reduced. Before 1994, banks were allowed to carry back losses for ten years. Currently, however, losses can be carried back only two years. In addition, despite increasing credit risk, loan loss reserve levels are shrinking. The ratio of loan loss reserves to gross loans as of quarter-end is 1.7 percent, down significantly from 3.0 percent in first quarter 1992.

Finally, the expansion into new business ventures such as insurance and securities underwriting and sales could also affect the amount of capital that an insured institution should maintain. These activities, along with other nontraditional banking services, can increase systems, reputational, operational, regulatory, and legal risks.

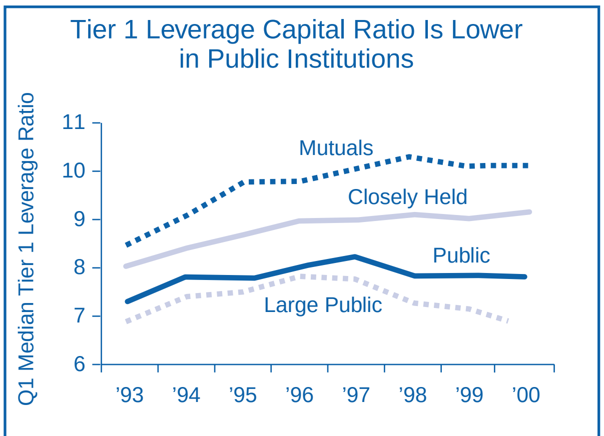
Large Publicly Traded Institutions Contribute Significantly to Lower Aggregate Capital Ratios

Given the extraordinary performance of the stock market over the past few years, publicly traded institutions have been pressured to provide higher returns to stockholders. While insured institutions may limit the risk of failure by maintaining high capital levels, they often do so at the expense of equity returns. As a result, some institutions may strive to boost returns aggressively through the use of leverage. Although borrowing money to purchase or originate interest-earning assets may increase earnings, it also causes the Tier 1 leverage capital ratio to decline. Subsidiaries of large publicly traded banking companies in the Region appear to have adopted this strategy. At the end of first quarter 2000, the large publicly traded institutions showed a median Tier 1 leverage capital ratio of 6.72 percent, 109 basis points lower than in first quarter 1996. During this time, the return on equity increased about 353 basis points, while borrowings as a percentage of assets increased from 10 percent to 21 percent. As seen in Chart 4, the median Tier 1 leverage capital ratio for banking subsidiaries of all publicly traded companies in the Region has been declining since 1997, primarily because of the large institutions, while mutual and closely held institutions' ratios have been rising. These trends suggest that shareholder pressure at publicly traded companies may result in the adoption of potentially higher-risk strategies, including greater operating leverage, to increase equity returns and shareholder wealth.

Large publicly traded institutions are also the primary contributors to the decline in the aggregate risk-based capital ratio for the Region's insured institutions. As of first quarter 2000, the Tier 1 risk-based capital ratio and the total risk-based capital ratio for these institutions were 8 percent and 11 percent, respectively. These ratios are down by 219 basis points and 133 basis points, respectively, from four years earlier.

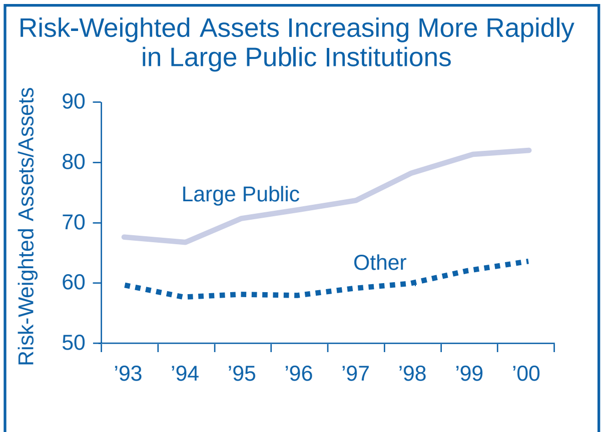
The lower risk-based capital ratios may also be attributable to pressure from stockholders. As depicted in

CHART 4



Source: Bank and Thrift Call Reports

CHART 5



Source: Bank and Thrift Call Reports

Chart 5, the increase in risk-weighted assets is particularly pronounced for large publicly traded institutions. In general, during periods of economic prosperity, higher risk-weighted assets provide greater yields than lower risk-weighted assets. Therefore, the increase in risk-weighted assets may be a result of some return-conscious management teams shifting the asset mix to a greater weighting in traditionally higher-risk loan types.

Summary

Although capital ratios remain relatively high, the amount of risk that insured institutions are accepting appears to be increasing. The trend of decreasing capital in the face of increasing levels of risk should be monitored to ensure that capital ratios remain adequate.

In the past few years, large public institutions that have tried to provide strong returns to shareholders have taken on a greater degree of operating leverage. This strategy has improved short-term equity returns during the current period of prosperity but may exacerbate poor returns during a period of financial hardship.

Stock Market Gains Have Benefited New England, but May Also Pose a Risk

Stock Market Benefits Region's Consumer Confidence and Spending

New England, particularly **Connecticut** and **Massachusetts,** has been among the nation's greatest benefactors from the late 1990s "wealth effect." Conceptually, the wealth effect is a gain (loss) in household spending that occurs given a gain (loss) in net worth. The change in spending is usually a small fraction of the change in wealth. In recent years, much of the increase in household net worth (leading to increased wealth-effect spending) has been driven by a surging stock market. Many U.S. households have enjoyed increased employment opportunities, income (through higher pay, bonuses, and stock options), and investment gains because of a rising stock market. Appreciation in home equity is also thought to contribute to household wealth and thus to wealth effect spending. A broader definition of the wealth effect also would encompass much of the recent business investment, hiring, and spending that has arisen from the strength in equity markets. The strong stock market has boosted business spending and investment by providing many firms with a lower cost of capital, decreased pension funding costs, and increased product demand (arising from business and consumer multiplier effects). In New England it is likely that the general surge in equity valuations in the latter half of the 1990s significantly boosted household income, wealth, and business hiring and investment.

The economic research and consulting firm ***Economy.com*** has identified Connecticut and Massachusetts as ranking among the states most exposed to the wealth effect. This assessment is based on criteria such as the location of (and employment in) financial services and information technology firms, household stock holdings, and state and local tax receipts from capital gains and property taxes. Although these states have benefited significantly from the recent increase in equity prices, they are also among the states most at risk from any sustained reversal in U.S. capital markets.

The linkage between shifts in the stock market and household spending can be seen readily at the national level. A comparison of quarterly changes (at annual rates) in the broadly based Wilshire 5000 stock market index with nominal U.S. personal consumption expenditures shows a 0.45 positive correlation between 1995 and first quarter 2000.[2] However, in the absence of

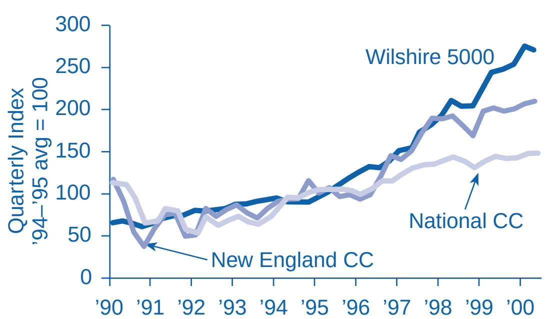
[2] While still positive, this correlation falls to only 0.24 if the entire decade of the 1990s (or the 1980 to 2000 period) is considered.

accurate personal consumption expenditure data at the state/regional level, we examine consumer confidence instead. Shifts in consumer confidence are closely linked to changes in consumer spending (including that component driven by household wealth). A comparison of the Wilshire 5000 with New England and U.S. consumer confidence highlights the stock market's effect on consumer confidence, and thus wealth-effect spending. Looking simply at levels between 1995 and mid-2000 it is evident that the near-tripling in the Wilshire 5000 had a more pronounced effect on New England consumer confidence than it did for the nation, especially between 1996 and 1997 (see Chart 6).

Further, during the market slump in late 1998, the decline in New England consumer confidence was greater than that for the nation, suggesting the Region has a somewhat elevated sensitivity to near-term shifts in the stock market. If reliable confidence measures were available for greater **Boston** and **Fairfield County,** Connecticut, this positive correlation likely would be much greater than those for either the Region or nation. The following section examines employment as a way of measuring local drivers of the wealth effect.

CHART 6

The Stock Market Has Some Influence on the Region's Level of Consumer Confidence



CC = Consumer confidence
Source: Conference Board and Haver Analytics

[3] For the purposes of this article, the information technology industry is defined as the manufacture of computer and office equipment (SIC code 357), communication equipment (SIC code 366), and electronic components (SIC code 367) as well as computer and data processing services (SIC code 737).

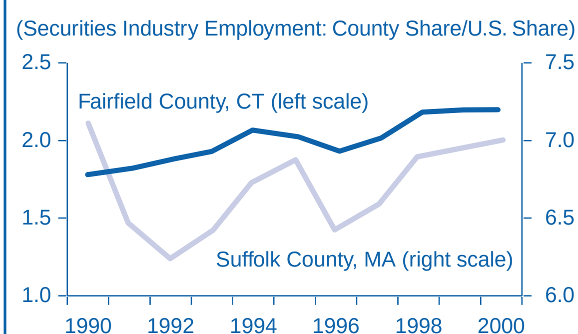
Nature of Local Employment Influences Dependence on Stock Market

The structural nature of county-level employment can provide some indication of a local economy's exposure to the vagaries of the stock market. Certain industries, such as securities/asset management, usually increase employment and pay concurrent with any escalation in equity markets. Others, such as information technology,[3] rely to a great extent on equity gains or venture capital funding (which is most readily available in bullish equity markets) to support ongoing operations. Growth at these companies, both internal and through acquisitions, is also financed primarily through equity. Chart 7 highlights the exposure to securities industry jobs in Fairfield County, Connecticut (that state's most proximate county to New York City's financial markets) and **Suffolk County,** Massachusetts (Boston).

The chart plots the share of local securities industry jobs relative to the nation during the first quarter of each year, with any value above 1 marking a greater concentration of these jobs than the nation. Both counties experienced an increase in employment in this industry during the 1990s, with Fairfield County's payrolls peaking at approximately twice the national share in recent years. Suffolk County, meanwhile, has come full circle from the late 1980s, with its share of securities industry jobs again around seven times the national average.

CHART 7

Boston and Fairfield County Are Much More Reliant on Stock Market Jobs than the Nation



Note: U.S. = 1
Source: WEFA GoFor, first quarter data

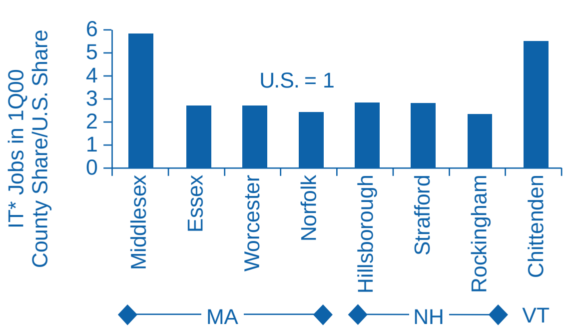
Information technology (IT) industries have also generated much of the recent growth in jobs around greater Boston (including **Worcester County,** Massachusetts, and southeastern **New Hampshire**), due in no small way to the benefits of a rising equity market. Chart 8 shows the recent concentration in IT employment relative to the nation for those counties around greater Boston, as well as that for **Chittenden County, Vermont.** All of these counties reported concentrations that are at least double the national average, with **Middlesex** and Chittenden having more than five times the national share. Chittenden's share largely reflects jobs at one employer, ***IBM,*** and is concentrated in the manufacturing of electronic components. In fact, Chittenden's concentration of employment in electronic components manufacturing is a whopping 18 times that of the nation. Middlesex County's IT employment base, on the other hand, is much more diverse, including numerous firms in multiple IT areas. Much of the recent growth in the county's IT employment base has been linked to the rapid expansion of Internet-related businesses.

Stock Market Wealth Exerts Strong Influence on Home Prices in Certain Markets

Residential real estate prices have also moved higher in response to the increased wealth of buyers and a generally limited inventory of homes for sale in certain markets. This has been the case particularly with high-end homes in metropolitan markets, where the wealth effect among households likely has been most pronounced, such as Boston and **Stamford** (Fairfield County, Connecticut). In addition to boosting the value of primary residences, increased discretionary income has helped

CHART 8

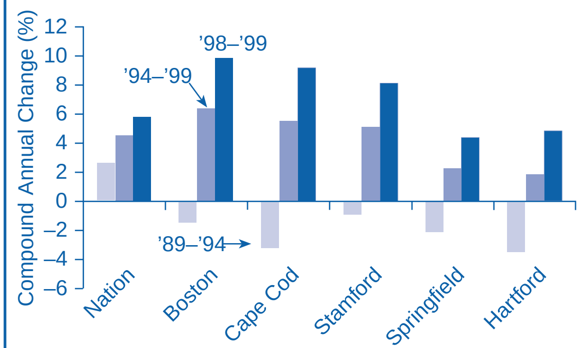
The Region's Leading Information Technology* Employment Clusters Include These Counties



* Computer/communication equipment/electronics manufacturing and software services (SIC codes 357, 366, 367, and 737)
Source: WEFA GoFor

CHART 9

Metro Areas Where Wealth Effect Predominates Have Experienced Stronger Home Price Gains



Source: Freddie Mac (Conventional Home Price Index)

to push up sales and prices in markets that have traditionally been associated with second and vacation homes, such as on **Cape Cod.** Chart 9 compares the compound annual growth in home resale prices (Freddie Mac conventional home price index) for select markets during the early 1990s with price gains in those same markets during the latter 1990s—when the wealth effect is thought to have become preeminent.

Between 1994 and 1999 (and particularly during the past two years), prices in those markets most likely influenced by the wealth effect generally rose faster than the national average. Prices in these areas also rose faster than in those New England metropolitan areas with lower concentrations of employment in IT and financial services, such as **Springfield** and **Hartford.** This measure of price appreciation captures sales that resulted in mortgages of approximately $250,000 or less.[4] Thus, it excludes high-end home sales that typically benefit the most from a rising stock market. However, a similar comparison among Boston, Springfield, and Hartford using ***National Association of Realtors*** statistics on median home prices (which are somewhat more influenced by high-end home sales) yields findings in line with those shown in Chart 9.

[4] The price index is based on conventional (non-federally-insured or -guaranteed), conforming mortgages (sales and refinancings) purchased by Freddie Mac. Conforming loans meet the agency's underwriting standards and do not exceed the allowable loan limit (which was $252,700 in 2000 for properties in the continental United States).

Implications for Insured Institutions

Most insured institutions in the Region have very modest exposure to highly valued equity markets, both in terms of directly held equities and through merchant banking operations. However, should the Region's economy falter because of weakness in the stock market, consumer and business credit exposure could be negatively affected. However, any such weakness likely would need to be severe, prolonged, and accompanied by other significant factors (such as a national recession) in order to result in an outright recession in the Region's economy.

Also of concern is that some homes and commercial properties currently may be experiencing levels of valuation that are sustainable only under a scenario of strong equity markets. For example, the recent rapid advance in home prices in those markets most likely influenced by the wealth effect may have resulted in somewhat inflated collateral values for residential real estate. Likewise, the rapid growth in demand for office and industrial space arising from the explosive growth in Internet-focused firms may have pushed commercial rents and prices above longer-term sustainable levels in some markets. Thus, property values could fall abruptly should a severe correction in equity markets occur that results in significant job or income losses by employees at area financial services or IT firms.

Boston Region Staff

Ranking Metropolitan Areas at Risk for Commercial Real Estate Overbuilding

- **In analyses conducted in 1998 and 1999, nine metropolitan areas were identified as at risk for overbuilding; this analysis notes more vigorous building occurring across multiple property types and identifies 13 markets, including eight of the previous nine, as at risk for overbuilding.**

- **Construction activity has accelerated during the current economic expansion with cyclically high levels of supply and demand.**

- **Capital markets scaled back their investments in commercial real estate in 1998 and 1999, while FDIC-insured institutions increased their construction and development lending by more than 20 percent each year.**

The banking industry and the FDIC learned during the late 1980s that once commercial real estate (CRE) markets become overbuilt, losses can mount quickly. During the 1980s and early 1990s, losses on CRE loans were responsible for hundreds of bank and thrift failures and billions of dollars in insurance losses for the FDIC. Since then, commercial vacancy rates have improved dramatically in a number of major U.S. metropolitan markets. In turn, CRE charge-offs reported by FDIC-insured institutions have fallen to very low levels—less than 0.05 percent of average loans in both 1998 and 1999.

Two recent studies published by the FDIC evaluate the risk of overbuilding in major U.S. metropolitan areas.[1] These studies identified nine cities—**Atlanta, Charlotte, Dallas, Las Vegas, Nashville, Orlando, Phoenix, Portland** (Oregon), and **Salt Lake City**—as markets at risk for rising commercial vacancy rates. This article revisits the FDIC's previous analysis of CRE markets. Using a more restrictive definition of at-risk markets, we find that eight of the previously identified nine markets remain on the list, joined by five additional markets: **Denver, Fort Worth, Jacksonville, Sacramento,** and **Seattle.**[2] In general, more markets are experiencing increased levels of construction activity across multiple CRE property sectors than was the case just two years ago.

Like the two earlier studies, this analysis does not predict an imminent rise in vacancies and losses in the at-risk markets. Instead, as before, the goal is to raise awareness about substantial growth in real estate development and the corresponding increases in risk exposure to financial institutions.

Previous Real Estate Cycles Are Well Documented

Many analysts view the late 1980s U.S. experience as the very definition of adverse conditions in CRE markets. The factors that brought about these adverse conditions are well documented.[3] During the early and mid-1980s, CRE construction boomed. Total office space completed in 54 major U.S. markets tracked by ***Torto Wheaton Research*** exceeded 100 million square feet per year every year from 1982 through 1987. Insured banks and thrifts were prime sources of credit for this building boom. Total outstanding construction and development (C&D) loans on the balance sheets of insured institutions grew by 52 percent, or $52.5 billion dollars, in 1985 alone, followed by three successive years of growth in outstanding C&D loans. A key factor behind this surge in lending was intense competition among lenders. In response to the heightened competition, many lenders loosened their underwriting standards, often extending credit on speculative projects on terms that did not protect them from downside risk. Examples of aggressive lending practices from this period included more collateral-based lending, higher loan-to-value limits, reliance on overly optimistic appraisals, and inattention to secondary repayment sources.

[1] See "Ranking the Risk of Overbuilding in Commercial Real Estate Markets," *Bank Trends,* October 1998, and "Commercial Development Still Hot in Many Major Markets, but Slower Growth May Be Ahead," *Regional Outlook,* first quarter 1999.

[2] The one metropolitan area identified in the prior analyses as at risk for overbuilding that did not fall into the same category using the stricter criteria in this analysis is Nashville. Nevertheless, Nashville still ranks high in terms of construction activity at fifth highest in the U.S. for retail and twelfth highest for office construction activity.

[3] See, for example, Freund et al. 1997. *History of the Eighties: Lessons for the Future,* Chapters 9 and 10. FDIC.

Poorly underwritten credit and massive increases in construction resulted in overbuilding in a number of large U.S. metropolitan markets. Nationwide, the office vacancy rate for competitively leased space peaked at over 19 percent in 1991.[4] In the Southwest and New England, where the cycle of overlending and overbuilding was most pronounced, metro real estate markets were in even worse shape. Office vacancies in Dallas peaked at over 27 percent in 1988, while office vacancies in Boston reached over 17 percent in 1990. As vacancies rose and rents fell, lenders in the Southwest, Northeast, and elsewhere increasingly found themselves in possession of nonperforming loans and impaired real estate assets. The result was a sharp increase in the number of failed banks in the Southwest and Northeast.[5]

Following the CRE debacle of the late 1980s and early 1990s, commercial construction and lending volumes slowed. C&D loan growth at FDIC-insured institutions declined every year from 1989 through 1994, while a similar drop in private construction expenditures lasted through 1993.

Factors Contributing to Cycle of Overbuilding in CRE

One reason that CRE markets are prone to periodic bouts of overbuilding is the business cycle itself, which saps demand for new space when business activity turns downward. But another important contributing factor is the lag time in the development process as new construction moves from inception to completion. Heavy demand at the start of a project may wane or vanish before completion occurs. In general, the time lag associated with CRE development is longest for hotel and office projects and becomes shorter for retail, multifamily, and industrial properties, respectively. The associated degrees of lending risk mostly follow the same pattern. In general, less risk is associated with industrial buildings and multifamily projects, which typically take less than one year to build.

To the extent that commercial construction projects involve a lag between inception and completion, net additions to supply can be anticipated in advance. Much progress has been made during this real estate cycle toward increased availability of information on CRE markets, particularly in regard to supply characteristics. Market transparency has been promoted in part by a heightened level of public ownership of CRE properties and the corresponding higher degree of disclosure by the owned entities, such as real estate investment trusts (REITs) and commercial mortgage-backed securities (CMBSs).

Changes in demand are harder to predict. A current example may be the high level of demand generated by Internet start-up companies that rely heavily on financing provided by venture capital funds and initial public stock offerings. Because many of these start-ups depend so heavily on cash inflows from investors as opposed to operating revenues, their viability as tenants and their continued demand for high volumes of office space may depend more on capital market conditions than on their own business performance. While demand may appear strong under robust business conditions, it is prone to decline rather suddenly in the event of an economic downturn. Given these attributes of CRE markets, the process of gauging the success for lease-up of a proposed project involves not only looking at new supplies of competitive space coming onto the market, but also evaluating how vulnerable the market is to a downturn in demand for space.

Recent Developments

Following a lull in commercial construction activity that resulted from adverse market conditions in the early 1990s, construction activity has gradually accelerated during the current economic expansion. The increased pace of construction occurred first in industrial and retail markets, where growth in net new completions of space picked up starting in 1993. The pace of multifamily construction accelerated in 1995, followed by increasing levels of office and hotel construction in 1997. Regionally, commercial construction activity recovered first in the Southeast and Northwest, where the effects of the previous overbuilding had been the least pronounced. Only later did the pace of construction increase in California, the Southwest, and the Northeast. As the U.S. economic expansion endures into its tenth year, construction activity continues to pick up steam across most property types. In the 54 major met-

[4] The U.S. vacancy rate is calculated as an aggregate of selected major markets tracked by Torto Wheaton Research.

[5] As further detailed in the *History of the Eighties,* combined assets of failed banks in the Northeast and Southwest comprised over 70 percent of assets of all banks failing between 1980 and 1994.

ropolitan areas tracked by ***Torto Wheaton Research,*** total annual office space completions rose from just over 3 million square feet in 1994 to 78.7 million square feet in 1999.

National private expenditures on hotel and retail construction for 1999 exceeded all prior years on both a current-dollar and an inflation-adjusted dollar basis. Similarly, national private construction expenditures on office space in 1999 were at an all-time high on a current-dollar basis. On an inflation-adjusted dollar basis, office construction expenditures in 1999 were still not as high as they were during the mid-1980s.

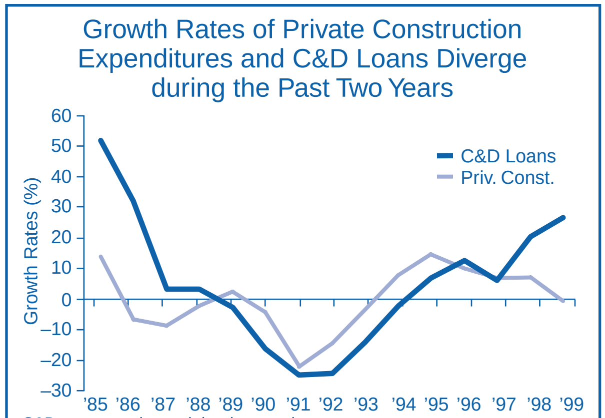
A new characteristic of the CRE industry in the current expansion has been the marked increase in capital availability through the financial markets. Annual issuance of CMBSs has grown from negligible amounts in 1990 to over $67 billion in 1999. Financing made available through REITs has been the other link to the capital markets. REIT market capitalization increased from approximately $10 billion in 1994 to nearly $145 billion in 1999.

While the availability of market-based sources of capital has helped to facilitate growth in construction during this expansion, the financial market turmoil of late 1998 cast a cloud over the CMBS market that has yet to lift fully. Significant events in the global capital markets in 1997 and 1998, including the Asian economic crisis and the Russian government bond default, significantly curtailed the ability of major CMBS issuers to go to the market for financing. Significant liquidity problems resulted for a number of commercial mortgage firms. Nomura, Lehman Brothers, CS First Boston, and others incurred losses, while Criimi Mae, Inc., was forced to declare bankruptcy.

As the capital markets pulled back from CRE investments, insured banks and thrifts stepped in to fill the void. Chart 1 shows that the total volume of C&D loans on the balance sheets of FDIC-insured institutions rose by more than 20 percent per year in both 1998 and 1999, even as growth in U.S. private construction expenditures slowed to a crawl.[6]

In terms of overall construction market activity, the current situation appears to be one of cyclically high

Chart 1



C&D = construction and development loans
Sources: Bureau of the Census (Haver Analytics), Bank and Thrift Call Reports (Research Information System)

levels of supply and demand. Because significant growth in net new space is forecast for many markets and property types during 2000 and 2001, a drop in demand for space could impair absorption rates and lead to higher vacancies and lower rents. Most analysts feel that future trends in real estate demand will be closely linked to national and regional economic conditions.

Identification of Markets at Risk for Overbuilding

Previous FDIC studies have identified CRE markets at risk for broad-based overbuilding on the basis of comparative rankings in the rates of growth in commercial space. In a 1998 study, U.S. metropolitan areas were ranked according to 1997 new construction activity as a percentage of existing stock for the five main property types: office, industrial, retail, multifamily, and hotel.[7, 8] In that study, any metro area that appeared in the top 15 for *any two* of the commercial property types was labeled "at risk." Nine cities were identified as being at risk for overbuilding: **Atlanta, Charlotte, Dallas, Las Vegas, Nashville, Orlando, Phoenix, Portland** (Oregon), and **Salt Lake City.**

[6] U.S. private construction expenditures, as calculated by the Bureau of the Census, include multifamily (two or more units), industrial, office, hotel, and retail space.

[7] Federal Deposit Insurance Corporation. October 1998. Ranking the Risk of Overbuilding in Commercial Real Estate Markets, *Bank Trends.*

[8] Construction activity is measured in square feet and includes projects completed during the year, plus projects still under construction as of year-end. This figure is then divided by the total stock of space to obtain a construction activity percentage for use in comparative rankings.

This study updates the previous results using year-end 1999 data.[9] In doing so, it applies more restrictive criteria to identify at-risk metropolitan real estate markets. As before, the metro areas are ranked according to new construction as a percentage of existing stock in each of the five main commercial property types. However, in this analysis, to be considered at risk, a metro area must rank in the *top ten* for any two of the property types. Despite the fact that it was harder for individual markets to qualify as being at risk, all but one of the previously identified nine markets remain on the at-risk list. Moreover, they are joined by five additional metropolitan areas: **Denver, Fort Worth, Jacksonville, Sacramento,** and **Seattle.** It is evident that more metropolitan areas are emerging with vigorous CRE construction and development across multiple property sectors.

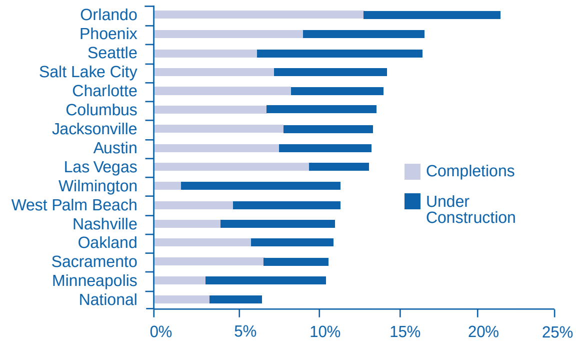
Most Active Construction Markets

Charts 2 through 6 represent the property sectors of office, industrial, retail, multifamily, and hotel. They also list, for each property sector, the metropolitan areas having the highest levels of construction activity, relative to existing stock, for the year ending December 31, 1999. The overall national construction activity rate is also shown for comparative purposes for each of the property sectors. Each metropolitan area is ranked from the highest to lowest for levels of construction activity.

As shown in these charts, **Las Vegas, Orlando,** and **Phoenix** are standouts, with each placing among the top ten metropolitan areas in the country for construction activity in at least four of the five different property sectors. **Las Vegas** is among the top ten in construction activity for all five property sectors except for hotel construction, where it ranks twenty-sixth.[10] **Las Vegas** ranks first in retail construction and second in industrial construction. **Orlando** is first in both office and multifamily construction. **Phoenix** is among the top ten for each of the five property sectors except hotel construction, where it ranks sixteenth.

CHART 2

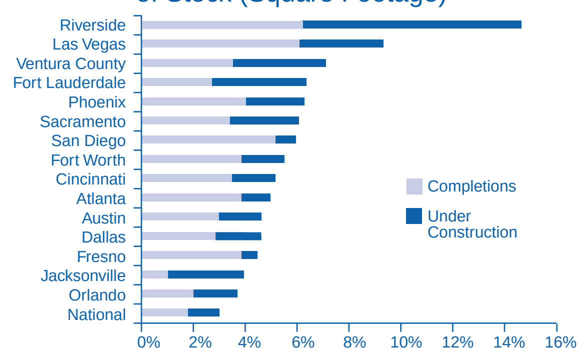
Top 15 Office Development Markets—Construction Activity in 1999 as a Percentage of Stock (Square Footage)



Source: Torto Wheaton Research

CHART 3

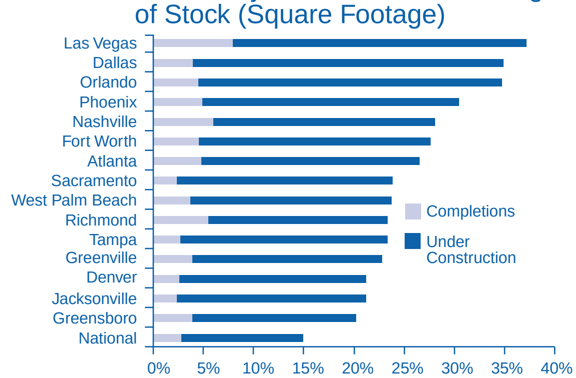
Top 15 Industrial Development Markets—Construction Activity in 1999 as a Percentage of Stock (Square Footage)



Source: Torto Wheaton Research

CHART 4

Top 15 Retail Development Markets—Construction Activity in 1999 as a Percentage of Stock (Square Footage)



Source: F.W. Dodge

[9] For the five property sectors reviewed in this report, data sources were **Torto Wheaton Research** for office and industrial and ***F.W. Dodge*** for retail, multifamily, and hotel. Torto Wheaton Research's data for office and industrial encompass 54 and 53 metropolitan statistical areas (MSAs), respectively. F.W. Dodge's data for retail, multifamily, and hotel encompass 58 MSAs.

[10] Las Vegas has the most hotel rooms in the country, with slightly fewer than 124,000 rooms as of year-end 1999. During 1999, Las Vegas experienced the greatest addition of rooms (in absolute numbers) of any market. With over 13,000 new rooms added during 1999, Las Vegas had nearly twice the level of the next highest metropolitan area, which was Orlando, with an additional 7,000 rooms.

Other markets deserve notice for their high or moderately high levels of construction activity in one or more property sectors. **Columbus, Ohio,** ranks sixth in the nation for its high level of office construction and twelfth for both multifamily and hotel construction. **Greenville** is tenth in the nation for hotel construction and twelfth for retail. **West Palm Beach** is ninth for retail and eleventh for office. **Austin** is eighth for office, eleventh for both multifamily and industrial, and thirteenth for hotel.

C&D Loan Concentrations

Concentrations of C&D loans at community banks in the at-risk markets are generally higher now than they were at the peak of the last cycle in the 1980s.[11] As shown in Chart 7, the median ratio of C&D loans to total assets as of March 31, 2000, was higher than the median ratio as of December 31, 1988, in ten of the thirteen at-risk markets.[12] The median C&D loan concentration is currently higher than the national average in all 13 at-risk markets.[13]

At present, overall loan performance remains very good for the C&D portfolios of insured institutions. Reported delinquent and nonaccrual C&D loans remain at nominal levels as a percentage of total loans, although the ratio for both measures increased marginally during the first quarter of 2000.

Construction Employment Concentrations

The percentage of a metropolitan area's workforce employed in construction is an indicator of the sensitivity of the local economy to construction. Six of the 13 metropolitan areas at risk for overbuilding are found among the top 12 most concentrated construction employment markets (see Chart 8, next page).[14] In addition, all of the 13 have construction concentration levels exceeding the national average. With slightly under 10 percent of its nonfarm workforce employed in construction, **Las Vegas** has the highest construction-

CHART 5

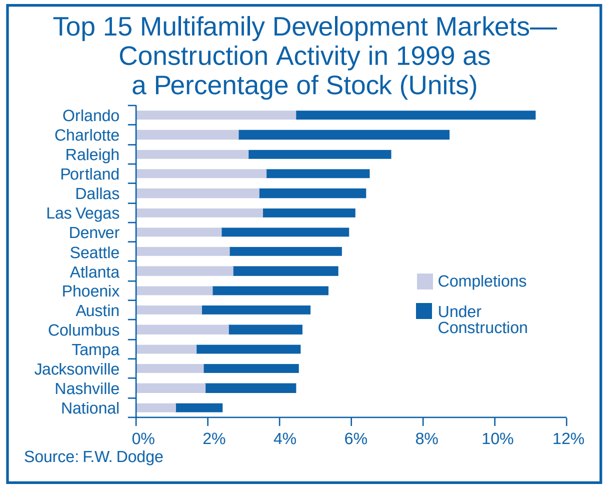


CHART 6

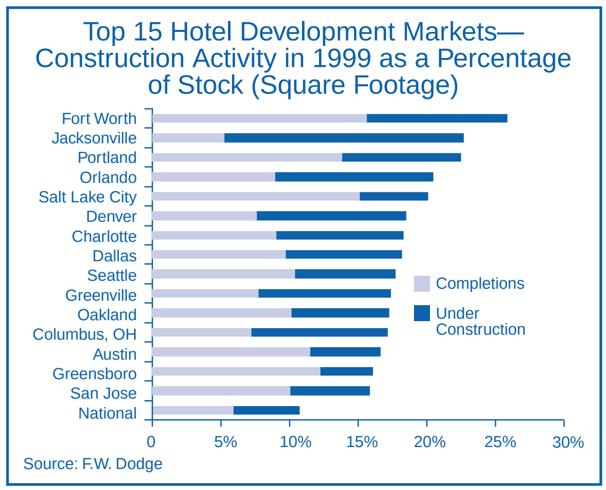
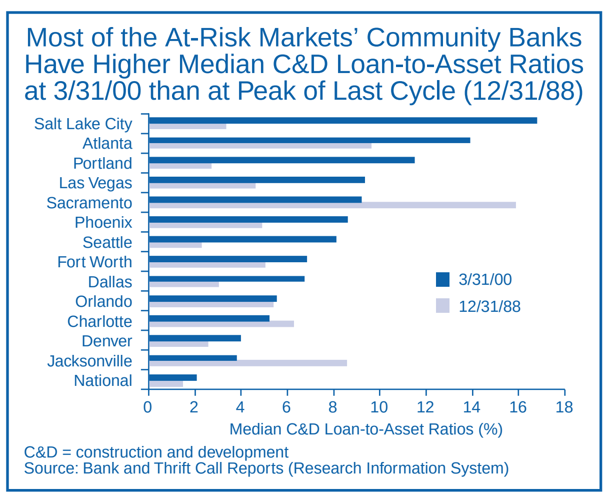


CHART 7



[11] Community banks are FDIC-insured institutions with assets less than $1 billion.

[12] For community banks that have C&D loans.

[13] Since 1992, the aggregate C&D-to-asset ratio for the nation's community banks has been higher than the C&D-to-asset ratio for institutions larger than $1 billion. This is a reversal of the condition from 1984 through 1991 when the aggregate C&D-to-asset ratio for institutions larger than $1 billion exceeded the C&D-to-asset ratio for community banks.

[14] Construction concentrations are the percentage of construction employees relative to the nonfarm workforce.

concentrated workforce of all metropolitan areas in the United States and is slightly over twice the national rate of 4.8 percent.

High Construction Activity and High Vacancy Levels

Newly constructed, speculative space competes directly for tenants against already-built and vacant space. To assess at-risk markets fully, it is useful to compare the levels of construction activity for each metropolitan area's property sector against its associated vacancy levels.[15]

Charts 9 through 13 show, by property sector, each city's level of construction activity plotted against the corresponding vacancy rate. It is axiomatic that a metropolitan area with high vacancies and high construction is cause for concern for builders and lenders alike.

It follows for metropolitan areas with high construction and high vacancy that newly arriving CRE projects will face significant competitive pressures in obtaining tenants. Consequentially, barring any preleasing or any fundamental upward shifts in demand, rental concessions may be needed to obtain tenants, and property values may be depressed.

CHART 8

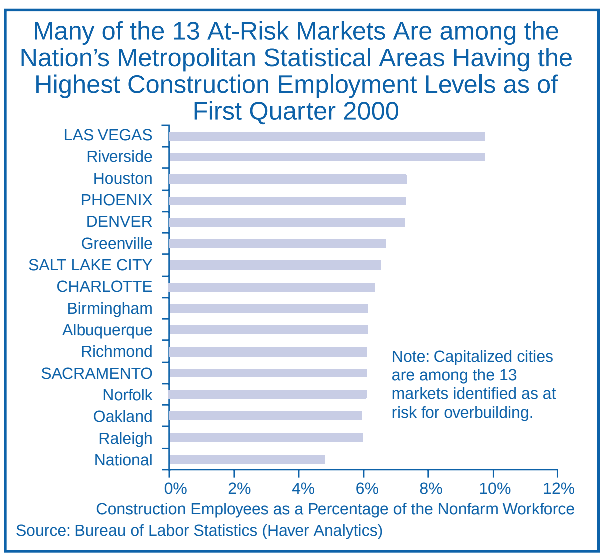


CHART 9

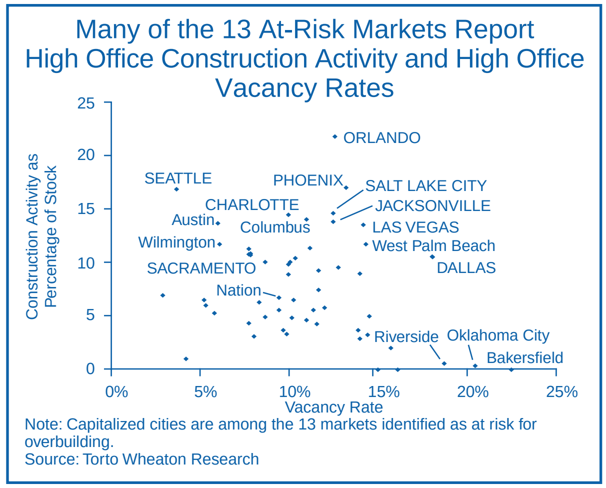


CHART 10

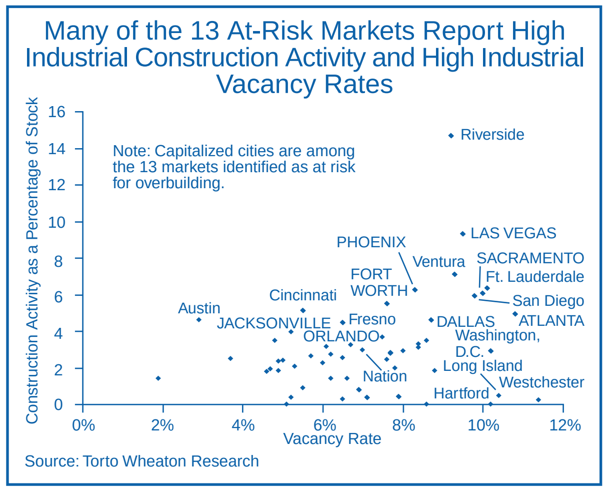
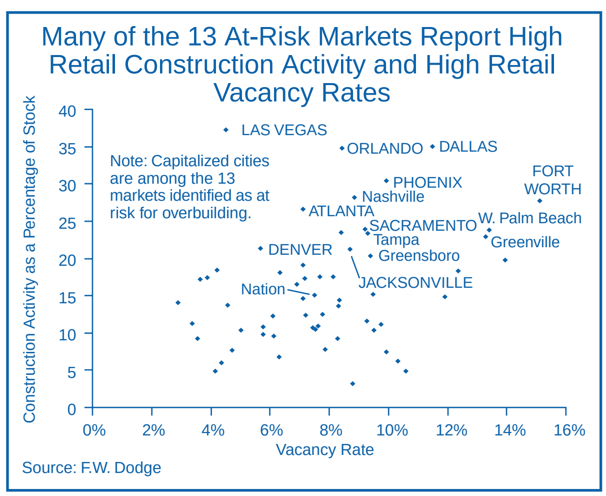


CHART 11



[15] The data vendors do not provide category breakdowns for construction activity into speculative versus nonspeculative (preleased) properties.

What Market Analysts Are Saying

Views of industry analysts provide additional perspective on the risks pertaining to each of the five property sectors and the individual metropolitan areas.

Office

Newly constructed nationwide office supply will outpace demand in 2000 and beyond, according to ***Torto Wheaton Research.***[16] Some 65 million square feet of space is scheduled for completion in 2000. However, net absorption is projected to be only 58 million square feet in 2000, resulting in an excess supply of 7 million square feet. Torto Wheaton Research predicts that office completions will outpace absorptions for all projected year-ends through 2005, and corresponding vacancy rates will climb to slightly more than 14 percent at year-end 2005.

Overall office fundamentals are in equilibrium, according to ***Donaldson Lufkin & Jenrette (DLJ),*** thanks to preleasing and sufficient demand.[17] Still, DLJ identifies a number of markets as being at greater risk for excess new supply. DLJ's markets to watch for possible overbuilding are Charlotte, Fort Lauderdale, Minneapolis, and Sacramento. More than 9 percent in new supply is projected for Sacramento over the next 18 months, with only a 3 percent increase in demand. DLJ identifies the Sacramento suburbs as the major center of construction activity and notes with concern the existing 13 percent suburban vacancy rate for this metropolitan area.

Overall office construction levels will peak this year, according to the ***Urban Land Institute (ULI).***[18] Increases in suburban office vacancy rates to nearly 11 percent by the end of 2000 are projected, with downtown rates falling to slightly over 8 percent. ULI notes the possibility of a rash of space returns by Internet companies and others in the technology sector as a significant going-forward risk.

Many analysts caution about the ability of new office construction to be absorbed in certain markets where labor supplies remain tight. In recent ***Wall Street Journal*** articles, Dallas and Seattle are reported to be actively recruiting high-tech engineers through immigrants from India and China to fill in the gaps in their tight labor-market pool for high-technology jobs.[19, 20]

[16] Torto Wheaton Research. Spring 2000. *Office Outlook.*
[17] Thierry Perrein, Donaldson, Lufkin & Jenrette. April 2000. *DLJ REIT Corporate Handbook, "Cautious Optimism."*
[18] Urban Land Institute. *ULI 2000 Real Estate Forecast.*
[19] Templin, Neal. June 7, 2000. Economic Focus: Houston, Dallas Are Draw for Immigrants. *The Wall Street Journal.*
[20] Barnes, Brooks. June 7, 2000. Economic Focus: Seattle Enjoys Influx of Foreign Workers. *The Wall Street Journal.*

In a recent office market report by ***Moody's Investors Service,*** three metropolitan areas (Jacksonville, Nashville, and Phoenix) are coded as "red"—indicating danger for high supply and declining demand factors.[21] Charlotte is coded as "yellow," and its office demand is projected to grow by only 5 percent this year, while supply will increase by over 11 percent.

Multifamily

Recent mortgage rate increases will slow purchases of single-family homes, thereby increasing the demand for multifamily properties, according to a recent article by ***PaineWebber.***[22] Nevertheless, concerns are raised for oversupply conditions for multifamily construction in Atlanta, Dallas, Houston, and Las Vegas—cities characterized as "low barrier-to-entry markets."

Markets appearing weak to ***DLJ*** for the multifamily property sector include Charlotte, Denver, Jacksonville, Orlando, Portland, Raleigh, Salt Lake City, and Seattle.[23]

Industrial

Atlanta and Dallas are weaker for the industrial property sector, according to ***DLJ,*** because of significant new supply levels.[24] A 7 percent supply growth is projected for Phoenix in 2000, with only a 4 percent increase in demand.

Retail

For retail properties, ***DLJ*** believes a number of markets have excess supply; the standouts are Austin, Las Vegas, Orlando, Phoenix, and Sacramento.[25]

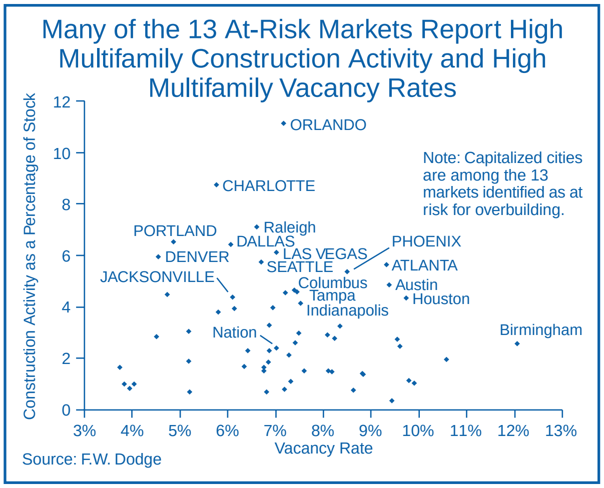
Hotel

Analysts point to specific concerns for a "glut" of limited-service hotels in certain markets and note many hotel developers taking advantage of low barriers to entry for hotel construction. In response, many developers argue that "product differentiation" within different hotel sectors justifies further development.

Growth in expenditures on hotel construction has been above 7 percent for each of the past several years, while room revenues grew at a more moderate pace, according to ***PaineWebber.***[26] The poor growth in room revenue is attributed to supply exceeding demand.

[21] Gordon, Sally. June 2, 2000. Moody's Investors Service, *Special Report—CMBS: Red-Yellow-Green Update, Second Quarter 2000, Quarterly Assessment of U.S. Property Markets.*
[22] PaineWebber. June 6, 2000. *Real Estate Investment Trust—Initiating Coverage on the REIT Industry.*
[23] Ibid.
[24] Ibid.
[25] Ibid.
[26] PaineWebber. June 1, 2000. *Industry Outlook Lodging, U.S. Hotel Construction Update—First Quarter 2000.*

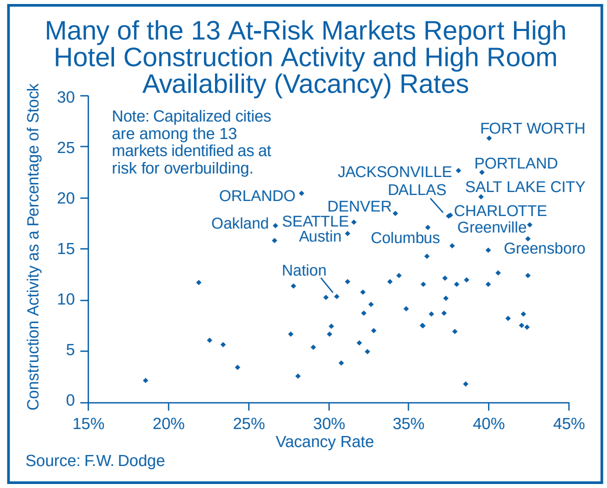
CHART 12



Many of the 13 At-Risk Markets Report High Multifamily Construction Activity and High Multifamily Vacancy Rates

Source: F.W. Dodge

CHART 13



Many of the 13 At-Risk Markets Report High Hotel Construction Activity and High Room Availability (Vacancy) Rates

Source: F.W. Dodge

As shown in the referenced charts, multiple cities are experiencing high volumes of construction activity concurrent with high vacancy rates. Seven of the 13 at-risk cities show up in the upper-right quadrants, exhibiting both high rates of construction and vacancy: **Atlanta** for industrial and multifamily; **Dallas** for office and retail; **Fort Worth** for retail and hotel; **Jacksonville** for office and hotel; **Las Vegas** for office and industrial; **Orlando** for office and multifamily; and **Salt Lake City** for office and hotel.

Other metropolitan areas beyond these 13 are precariously situated at the furthermost positions on the charts for high vacancy and high construction levels: **Austin** and **Houston** for multifamily; **Greensboro** for hotel; **Greenville** for retail and hotel; and **West Palm Beach** for office and retail.

Conclusion

Since 1997, responding to a void left by the departure of other capital market lenders, community banks have stepped up their CRE lending activity. At the same time, more metropolitan areas are emerging with vigorous CRE construction and development across multiple property sectors. In the 1998 and 1999 FDIC analyses, nine metropolitan areas were identified as being at risk for overbuilding across multiple property types. In the present analysis, 13 metropolitan areas, including eight of the nine from the prior analyses, receive this designation. Given strong levels of CRE completions, these metropolitan areas are particularly sensitive to any decline in real estate demand that could result from a slowdown in the national or regional economy.

Thomas A. Murray, Senior Financial Analyst

Rising Home Values and New Lending Programs Are Reshaping the Outlook for Residential Real Estate

- **Home prices have risen rapidly in several major U.S. metropolitan areas.**
- **The credit quality of residential real estate loan portfolios traditionally has been solid.**
- **New lending programs such as subprime and high loan-to-value lending could change the historical loss experience associated with residential real estate.**

Introduction

The median price of an existing single-family home has been rising rapidly in several U.S. metropolitan areas. After a prolonged period of stagnant or slowly rising resale prices in many of these markets throughout most of the 1990s, prices have rebounded strongly, reaching double-digit rates of growth in some areas. Not surprisingly, these markets have also experienced relatively robust job growth, particularly in high-tech sectors that have been the catalyst for growth in the New Economy.[1]

However, as existing home prices in some markets have been rising rapidly, new building activity has recently begun to slow because of rising interest rates. After reaching a 19 percent year-over-year growth rate in the fourth quarter of 1998, single-family housing starts declined by 2.8 percent in the second quarter of 2000. Similarly, year-over-year growth in single-family housing permits declined by 8.4 percent in the second quarter of 2000. Higher home mortgage rates, along with the prospect for more moderate job growth, have dampened market activity.

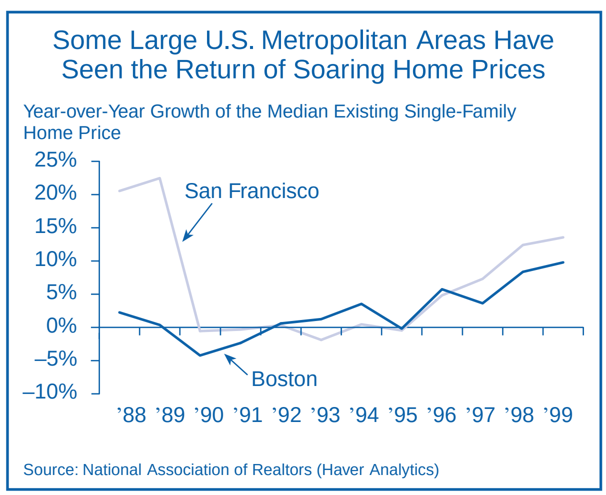
Single-family mortgages have traditionally been associated with low loss rates compared with other, higher-risk lending lines at insured institutions. However, the real estate market is still susceptible to boom and bust cycles, which could pose a risk to institutions with exposures to residential real estate. This risk would be heightened by the formation of asset price bubbles in local markets. Furthermore, as the competition among mortgage lenders becomes more intense, insured institutions are increasingly participating in new, higher-risk types of mortgage lending, such as high loan-to-value (LTV) lending and subprime lending. These new lending practices—still largely untested in a recession—raise some concerns about the future credit quality of residential loan portfolios.

Home Prices in Some Local Markets Are Soaring

Home prices have been soaring recently in a number of large U.S. metropolitan markets. Rapid price increases in some of these areas have come on the heels of a period of slow or stagnant growth (see Chart 1). Table 1 (next page) identifies the top 20 metropolitan markets based on the median price of an existing single-family home. Many of the areas identified in the table are also places where home prices are increasing most rapidly. Healthy job growth, tight labor market conditions, and a tight supply of available homes have contributed to price increases in these areas.

Some of the same metropolitan areas that are experiencing significant home price appreciation are also highly dependent on the high-tech sector. The shaded areas in Table 1 highlight the metro markets that not only have the highest median home prices in the nation but also have a concentration of high-tech employees in the workforce greater than 5 percent. Explosive growth

Chart 1



[1] For a discussion on what is meant by the term "New Economy," see "Banking Risk in the New Economy," *Regional Outlook,* second quarter 2000; http://www.fdic.gov/bank/analytical/regional/ro20002q/na/t2q2000.pdf.

Table 1

Of the 20 U.S. Cities with the Most Expensive Housing, More than Half Have a Concentration in High-Tech Employment		
The shaded areas indicate markets where high-tech employees constitute at least 5 percent of the total payroll employment (see note).		
Metropolitan Statistical Area Ranking by Median Home Price	**Median Price of an Existing Single-Family Home March 2000**	**Percent Change from One Year Ago**
1 San Francisco, CA	$418,600	25.0%
2 Orange County, CA	$300,800	10.3%
3 Honolulu, HI	$289,000	–2.0%
4 Boston, MA*	$255,000	8.4%
5 San Diego, CA	$251,400	16.1%
6 Bergen-Passaic, NJ	$250,200	9.8%
7 Newark, NJ	$229,500	18.8%
8 Seattle, WA	$226,100	8.3%
9 New York, NY	$221,500	14.3%
10 Nassau-Suffolk, NY	$209,200	12.8%
11 Los Angeles, CA	$202,900	5.6%
12 Middlesex, NJ	$198,500	8.6%
13 Monmouth-Ocean, NJ	$186,200	19.4%
14 Denver, CO	$181,500	12.9%
15 Washington, DC-MD-VA	$177,500	5.6%
16 Portland, OR	$166,700	0.8%
17 Chicago, IL	$166,700	0.4%
18 Lake County, IL	$162,600	–2.2%
19 Aurora-Elgin, IL	$158,200	7.5%
20 Raleigh-Durham, NC	$156,300	–4.2%
Nation	**$133,533**	**2.7%**

* Ranking based on the latest data available (third quarter 1999).
Note: High-tech, as defined by Dismal Sciences, Inc., includes industries such as pharmaceuticals, computers, electronic components, communications equipment, and communications services.
Sources: National Association of Realtors (Haver Analytics); Dismal Sciences, Inc.

in technology industries during this expansion has created new job opportunities in many metropolitan areas where high-tech companies and employment tend to be concentrated. The influx of highly skilled, and often highly compensated, high-tech workers into these areas has boosted the demand for both new and existing homes, pushing up home prices. For example, in San Francisco, where high-tech employees now comprise 7.1 percent of the total workforce, home prices rose by 22 percent in calendar year 1999 and are expected to rise another 14 percent in 2000.[2]

[2] July 21, 2000. Your Money Matters: Turning Down the Heat on Home Prices—Forecasters Find More Evidence That the Market Is Cooling; San Francisco Still Rocks. *The Wall Street Journal.*

Soaring home prices in these metro areas have created the possibility of speculative price bubbles that could cause problems for mortgage lenders. If a decline in high-tech employment or company earnings were to cause a deterioration in home values in these markets, the credit quality of mortgage portfolios at insured institutions could be jeopardized.

Favorable Economic Conditions Have Sustained Consumer Spending Patterns

As the current U.S. expansion entered its 113th month in July 2000, consumer spending continued along a path of rapid growth. In the second quarter of 2000, personal consumption expenditures increased by 8 percent over the previous year. Nearly ideal conditions for consumers have contributed to high levels of spending. The unemployment rate remains near the record low of 3.9 percent set in April 2000, and consumer confidence remains near the record high set in January 2000. Moreover, consumer buying power has been boosted by real wage gains, generally low interest rates, and stock market earnings.

One of the only negative aspects for consumers has been the recent rise in interest rates, which has increased the cost of borrowing. From the end of 1998 to June 2000, both the bank prime lending rate and the average mortgage contract rate for purchase of a previously occupied home rose by more than 100 basis points. However, the flexibility offered by adjustable-rate mortgages (ARMs) has helped consumers shield themselves from the full effects of interest rate increases. As of the second quarter of 2000, the share of ARMs as a percentage of all loans closed had risen from 10 percent in the fourth quarter of 1998 to 30 percent (see Chart 2).

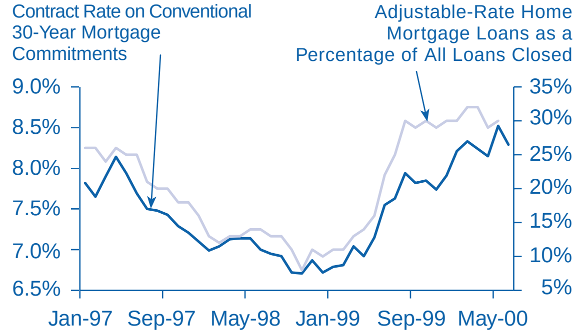
Nonetheless, as interest rates have risen, overall activity in the single-family housing market has slowed noticeably. After reaching an annualized rate of 1.4 million units in December 1999, monthly starts of single-family homes have declined by more than 15 percent to 1.2 million units in June 2000. Similarly, the annualized rate of single-family permits issued in June 2000 was down 14 percent from January 2000 levels. The ***National Association of Realtors (NAR)*** reports that, despite current high levels of activity, deteriorating affordability conditions are expected to slow the resale housing market over the course of the year.[3] In June 2000, NAR's composite Housing Affordability Index fell to its lowest point since September 1996. To the extent that any decline in economic conditions would produce a less favorable environment for consumers, the housing market would likely slow even further.

Overall Credit Quality of Residential Mortgages Has Been Solid

Historical losses from residential real estate exposures at insured institutions are well documented. In the 1980s, areas such as Texas, California, and New England experienced strong economic growth, rapid residential development, and sharp home price appreciation that created asset price inflation. Coastal California markets, in particular, experienced double-digit growth rates that propelled the median home price in California to more than double the national average.[4]

CHART 2

More Consumers Have Chosen ARMs as Mortgage Rates Have Risen



Sources: Federal Reserve Board; Federal Housing Finance Board (Haver Analytics)

Regional recessions in many of these areas took a toll on residential real estate markets. Home values either stagnated or declined precipitously, and the foreclosure rate on residential real estate began to rise rapidly. Nevertheless, very few bank failures can be attributed solely to losses on residential mortgages. Loss rates on residential loans have traditionally been low compared with other loan categories.

The credit quality of conventional single-family mortgage portfolios has generally been good throughout this economic expansion. The percentage of conventional loans past due during this expansion has averaged 2.8 percent, compared with 3.5 percent during the last expansion from 1982 to 1990.[5] Moreover, past-due conventional loans fell for the sixth consecutive quarter in the first quarter of 2000 to 2.3 percent (see Chart 3, next page). Foreclosures started, while slightly higher on average than the previous expansion, remain at a healthy level well below 1 percent of loans (see Chart 4, next page).

[3] National Association of Realtors Press Release. August 1, 2000. Housing Affordability Drops to Eight-Year Low, NAR Reports.

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

[5] "Past due" refers to loans that are 30 or more days past due.

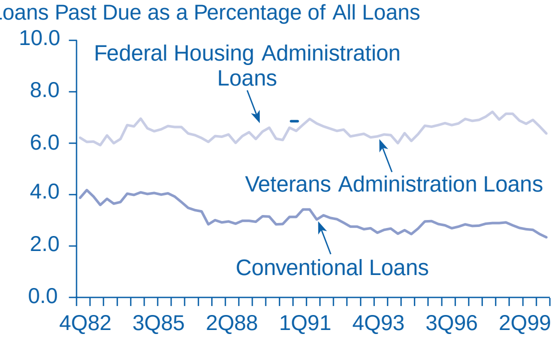
By contrast, Veterans Administration (VA) and Federal Housing Administration (FHA) loans have performed less well during this expansion. These loan types are both designed to aid less creditworthy borrowers in securing a home loan. VA and FHA loans, which include a portion of the higher-risk high-LTV and subprime loans, have historically experienced higher past-due and foreclosure rates than other classes of mortgage loans (see Charts 3 and 4).

The overall performance of 1–4 family residential mortgages at insured institutions has been solid. As of March 2000, delinquent 1–4 family loans remained well under 1 percent of total 1–4 family loans, and the percentage of charge-offs was nearly zero. Charge-offs may have reached the bottom of the credit cycle in 1998, however, after peaking at a record high in 1993 (see Chart 5).

CHART 3

Past-Due Rates on FHA and VA Loans Have Historically Been Higher than on Conventional Loans

Loans Past Due as a Percentage of All Loans

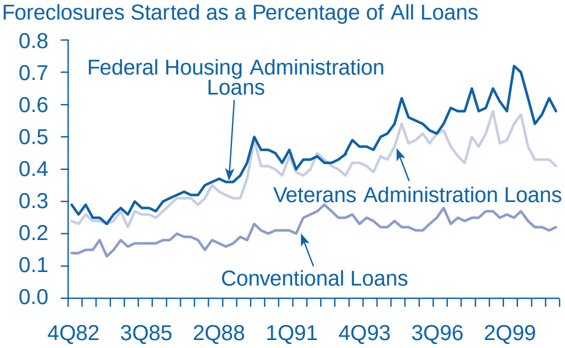


Source: Mortgage Bankers Association (Haver Analytics)

CHART 4

Foreclosure Rates on FHA and VA Loans Remain Higher than on Conventional Loans

Foreclosures Started as a Percentage of All Loans



Source: Mortgage Bankers Association (Haver Analytics)

A trend toward higher charge-off rates might be cause for concern at a time when conditions in the consumer sector seem to be excellent. Moreover, as with regional problems that surfaced in the late 1980s and early 1990s, the aggregate data may still mask evolving submarket residential real estate problems associated with local economic and business conditions or new, higher-risk lending lines of business.

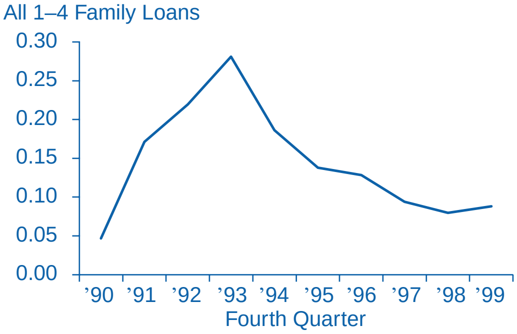
Concerns have arisen recently about the future of residential loan credit quality and consumer credit quality in general. The ***Board of Governors of the Federal Reserve System*** warned that, although the consumer sector seems healthy by most measurable standards, "[consumer] delinquency rates may be held down, to some extent, by the surge in new loan originations in recent quarters because newly originated loans are less likely to be delinquent than seasoned ones."[6] Consumer credit outstanding grew by nearly 8 percent in the second quarter of 2000, the highest growth rate in the past three years. At the same time, 1–4 family loans at insured institutions expanded by 11 percent from March 1999 to March 2000, the highest year-over-year growth rate since 1997.

High growth rates are not the only concern regarding the future credit quality of residential loan portfolios. Rising interest rates have raised the cost of borrowing for consumers at a time when consumer credit has been expanding rapidly. Mortgage debt service payments as a percentage of disposable personal income rose to nearly 6 percent in the first quarter of 2000, continuing an

CHART 5

1–4 Family Loan Charge-Offs May Have Reached the Bottom of the Credit Cycle

1–4 Family Loan Charge-Offs as a Percentage of All 1–4 Family Loans



Source: Bank and Thrift Call Report Data (Research Information System)

[6] Board of Governors of the Federal Reserve System. July 20, 2000. Monetary Policy Report to the Congress, p. 7.

upward trend since mid-1994. This level was last reached in 1991, when the economy was emerging from an economic recession and some local residential markets were in turmoil. Further increases in interest rates would push mortgage debt service payments higher, which could impair the ability of mortgage holders to service both mortgage debt and other consumer debt. Moreover, other consumer loans would likely enter delinquency before mortgage loans, as consumers are more likely to pay their mortgages before other consumer debt.

New Residential Lending Programs May Heighten the Risk Exposure of Insured Institutions

Recent trends in high-LTV and subprime lending have heightened the risk exposure of insured institutions. Intense competitive pressure in the banking industry has narrowed the margins of traditional lending lines, inducing banks to seek more profitable lines of business. Both high-LTV and subprime lending offer wider margins, but at the price of increased risk to the lender.

High-LTV loans represent greater risk to lending institutions when collateral values decline. If a home loan is underwritten on the basis of an inflated home value, there is a greater possibility of default if the value of the home declines. Furthermore, a decline in the value of the home could reduce the possibility of recovering the loan in the event of default and foreclosure.

The share of high-LTV loan originations is growing.[7] The percentage of loans with an LTV ratio greater than 90 percent has risen from around 5 percent to more than 20 percent over the past ten years.[8] Table 2 identifies the metropolitan areas where more than 30 percent of the conventional home loans underwritten in 1999 carried an LTV ratio greater than 90 percent. Given that the historical cycles of boom and bust in residential real estate have often been geographically isolated, both regional and national trends in high-LTV lending should be carefully monitored.

Subprime lending is a term commonly used to refer to loans that are extended to borrowers who are perceived as less creditworthy.[9] As insured institutions have increased their involvement, the subprime lending market has presented banks with new growth opportunities and new risks. Subprime loans represent a small but growing share of total mortgage originations (see Chart 6, next page). To be sure, higher pricing on subprime loans promises wider margins and higher revenues for lenders, but the credit risk associated with less-than-prime borrowers requires ongoing oversight and management to prevent credit losses from eroding margins. Some financial institutions that have either grown subprime portfolios or acquired subprime affiliates are now scaling back their involvement in subprime

Table 2

Pockets of Risk May Be Forming Where the LTV Is Highest

Metropolitan Statistical Area (MSA) or Consolidated MSA Ranked by Percentage of Loans with LTV Greater than 90 Percent	Percentage of Loans with LTV over 90 Percent 1999
1 Greenville-Spartanburg-Anderson, SC	50%
2 Honolulu, HI	42%
3 Memphis, TN	38%
4 Charlotte-Gastonia-Rock Hill, NC-SC	37%
5 Birmingham, AL	35%
6 Houston-Galveston-Brazoria, TX	35%
7 Atlanta, GA	32%
8 Jacksonville, FL	32%
9 Nashville, TN	32%
10 Oklahoma City, OK	32%
11 Tulsa, OK	32%
12 Greensboro–Winston-Salem–High Point, NC	31%
13 Kansas City, MO-KS	30%
14 Las Vegas, NV-AZ	30%

LTV = loan-to-value
Source: Federal Housing Finance Board

[7] See also Diane Ellis. **"High Loan-to-Value Lending: A New Frontier in Home Equity Lending."** ***Regional Outlook,*** first quarter 1999; http://www.fdic.gov/bank/analytical/regional/ro19991q/na/t1q1999.pdf.

[8] Federal Housing Finance Board.

[9] See also Kathy R. Kalser and Debra L. Novak. "Subprime Lending: A Time for Caution." *Regional Outlook,* third quarter 1997; http://www.fdic.gov/bank/analytical/regional/ro19973q/pdf/roa1997.pdf.

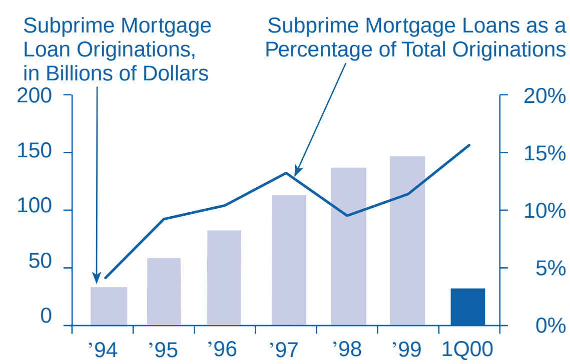
lending activities to limit projected losses.[10] In some cases, excessive losses related to the business of underwriting subprime loans have contributed to the failure of insured institutions.

A recent report from ***Inside Mortgage Finance*** states that subprime portfolios are showing evidence of weakness.[11] According to this report, the serious delinquency rate in the overall subprime market rose from 6.5 percent in 1998 to 6.9 percent in 1999.[12] Furthermore, the percentage of A-rated borrowers in the subprime market fell from 59 percent to 53 percent during the same period. The implication is that both subprime and prime mortgages originated this year could likely underperform relative to prior years, adversely affecting credit quality at insured institutions.

The potential for higher future losses related to subprime lending is of particular concern. The delinquency rate on subprime mortgages has traditionally been much higher than that of prime mortgages. As of December 1999, seriously delinquent prime mortgage loans comprised only 0.5 percent of total mortgage loans, compared with 3.2 percent of the best-rated subprime loans. Subprime mortgage loan seasoning analysis shows that 1999 vintage subprime loans have so far outperformed both 1997 and 1998 vintage loans (see Chart 7). However, there is a concern that adverse changes in economic conditions and the health of the consumer sector could cause the foreclosure rate on subprime mortgage loans to increase more steeply than in prior years.

CHART 6

Subprime Mortgage Loans Are Growing as a Percentage of Total Mortgage Originations



Sources: The Mortgage Market Statistical Annual for 1999; Inside B&C Lending

Conclusion

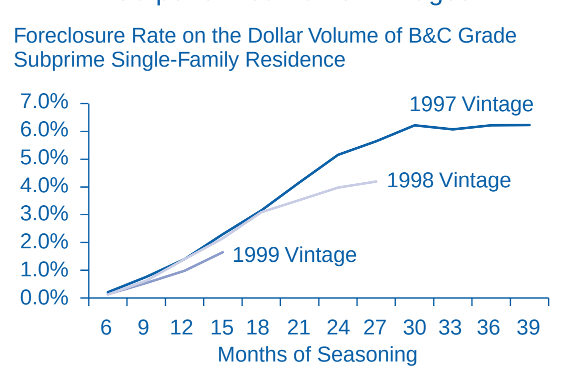
Rising home prices in some U.S. metropolitan areas may be a warning sign that asset price bubbles may be forming in some areas. A number of these areas also contain concentrations of employment in the high-tech sector, placing them at higher risk in the event of a downturn in that sector. Mortgage lenders in these areas should carefully monitor developments that could adversely affect home prices and collateral values. Nationally, single-family housing market activity appears to be slowing after a period of rapid growth supported by a long economic expansion and generally favorable interest rates.

Historically, mortgage loans at insured institutions have been one of the best-performing asset classes. As 1–4 family loan charge-offs have approached zero, it appears as if the credit cycle may have bottomed out, implying that loss rates may be rising. Moreover, as insured institutions increase involvement with subprime and high-LTV lending, the potential for higher future losses on residential real estate also increases. It will be important to keep an eye on developments in the economy and the consumer sector that could affect the future credit quality of residential real estate at insured institutions.

Alan Deaton, Financial Economist

CHART 7

1999 Vintage Subprime Residential Loans Have Outperformed Earlier Vintages



Source: Mortgage Information Corporation

[10] Subprime Mortgage Market Faces More Challenges in Second Half of Turbulent 2000. *Inside Mortgage Finance.* July 7, 2000.
[11] Mortgage Delinquency Rates Decline in Early 2000 But Industry Braces for Shift in the Wind. *Inside Mortgage Finance.* July 14, 2000.
[12] Seriously delinquent loans are defined as loans at least 90 days delinquent or in foreclosure.

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