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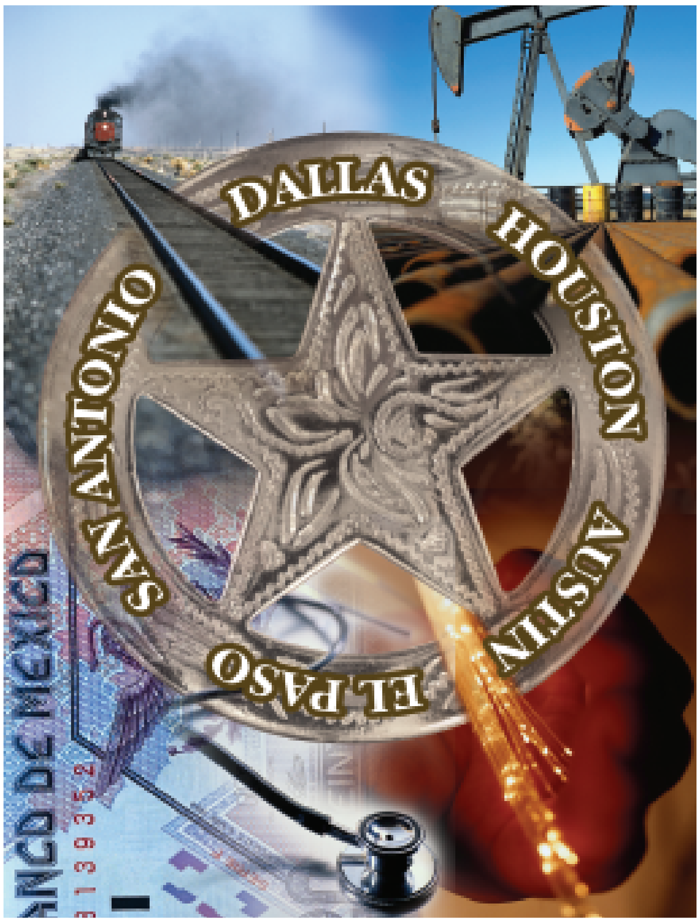
Southwest Economy



Economic Recovery Under Way in Major Texas Metros

Texas' major metropolitan areas account for almost 70 percent of the state's employment, so their fortunes determine the impact business cycles have on the state as a whole. When it comes to what makes their economies tick, Texas' major metros are different—a fact that partially explains why some boomed during the 1990s and others grew more moderately. These differences also determined, to some extent, each metro's fate during the recession of 2001 and, more recently, the recovery.

For instance, because of its central location, Dallas/Fort Worth serves as a trade center and distribution hub. With historic ties to oil and defense electronics, it has also become the state's telecommunications nexus. Austin's concentration of higher education and high-tech research has contributed to the city's thriving electronics manufacturing and semiconductor industries. Houston retains its strong ties to the oil and gas industry, but its port makes the metro an important player in international trade. San Antonio's economy relies on tourism and trade and is bolstered by a large military presence. Finally, El Paso's economy

(Continued on page 2)

How Vulnerable Are Housing Prices?

In recent years, overall home prices have risen dramatically, by 37 percent since 1997 (26 percent when adjusted for inflation). Such increases have raised concerns that low interest rates have spawned a housing-price bubble. In such a case, previous increases in housing prices would leave them so far out of line with fundamentals that they would be vulnerable to falling.

If a national housing-price bubble has emerged, the pace of the current economic recovery could be affected in two ways. First, fears that housing prices could fall may deter families from buying new homes, which could slow home construction. Second, actual declines in housing prices could slow consumer spending by reducing housing wealth. This is important because, as emphasized by Federal Reserve Chairman Alan Greenspan, people have

(Continued on page 11)

How Vulnerable Are Housing Prices?

(Continued from front page)

increasingly tapped housing wealth to fuel consumer spending in recent years, helping offset the drag from past stock market losses.[1]

This article reviews evidence on the possibility that housing prices could fall, first discussing key considerations about housing prices and then turning to the vulnerability of national, regional and metro housing prices. Throughout, housing prices are measured by indexes that control for quality changes by tracking prices from repeat home sales in different broad areas. Consequently, the article does not comment on home prices in particular neighborhoods, nor does it shed light on differences in home prices within various parts of the country (for example, upper-end versus middle-range or low-end priced homes).

Still, we can glean some information about how vulnerable housing prices are to declines nationally and in particular regions and cities. One key finding is that although there is little risk of a national bubble, prices in some areas are vulnerable if local economic conditions deteriorate.

Key Considerations

Several considerations are important in assessing whether housing prices are vulnerable to sizable declines. First, household income and other aspects of affordability matter, as do the relative returns on housing as an investment. Second, unlike stock prices—which tend to fall quickly when stock-price bubbles collapse—home prices are apt to rise more quickly than they fall. Slow home-price declines can occur because the high costs and hassles of moving cause families to delay selling their homes, particularly if they lack the liquidity to sell at a loss in a down market.[2] Third, rather than characterizing houses as over- or underpriced, it is more useful to gauge the susceptibility of housing prices to negative economic developments. Finally, because housing prices and economic growth can diverge across the United States, we need to distinguish between national and regional vulnerabilities to price declines.

How Vulnerable Are National Prices?

In looking at U.S. housing prices, it is reassuring that the magnitude of the weakness during and following the 2001 recession was smaller than that of prior recessions in terms of unemployment and real disposable income growth. For example, the unemployment rate did not rise above that of the 1990–91 recession or its aftermath.

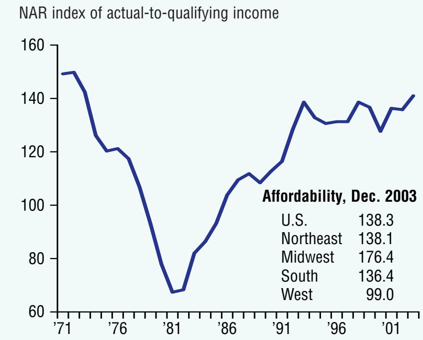
Based on the ratio of home prices to consumer prices, housing prices seem high (*Chart 1*). However, their vulnerability to negative economic developments appears low when assessing them relative to income and even lower when looking at housing affordability, which also reflects mortgage interest rates.

Indeed, housing is affordable across the United States, according to the National Association of Realtors' index. This index measures actual median income relative to the income needed to qualify to buy a median-priced home with 20 percent down at the average prevailing mortgage rate. For example, in December 2003 median income was 138.3 percent of that needed to qualify (*Chart 2*). Affordability is high in all regions except the West. Together, the mild recession and high affordability imply little risk to overall U.S. home prices.

Nevertheless, risks do exist. First, mortgage interest rates could rise further from their June 2003 lows, cutting affordability. Fortunately, even if rates rose a full point (from 5.4 percent in June—and from 5.82 percent in December—to 6.4 percent), affordability would still be high. For example, using this higher mortgage rate and holding median home prices and median family income constant from December 2003, affordability would be 130.2, versus 141.6 in June 2003 and 138.3 in December 2003.

Chart 2

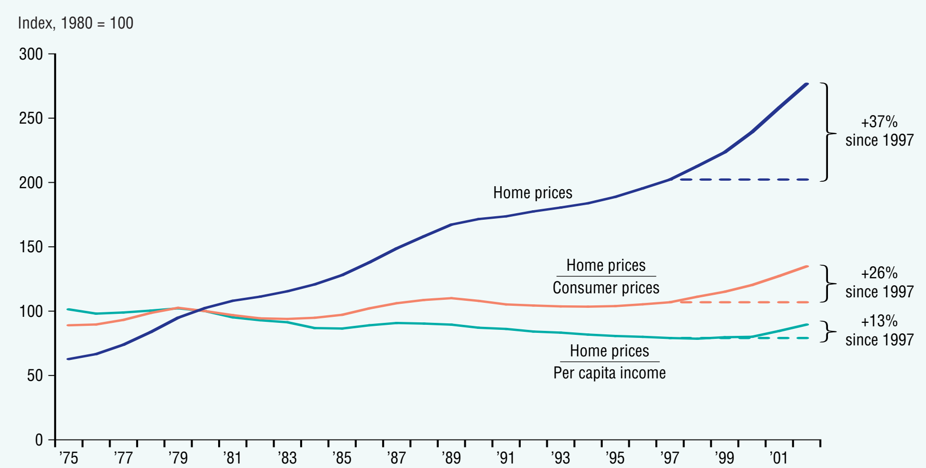
Housing Appears Affordable at the National Level



SOURCE: National Association of Realtors (NAR).

Chart 1

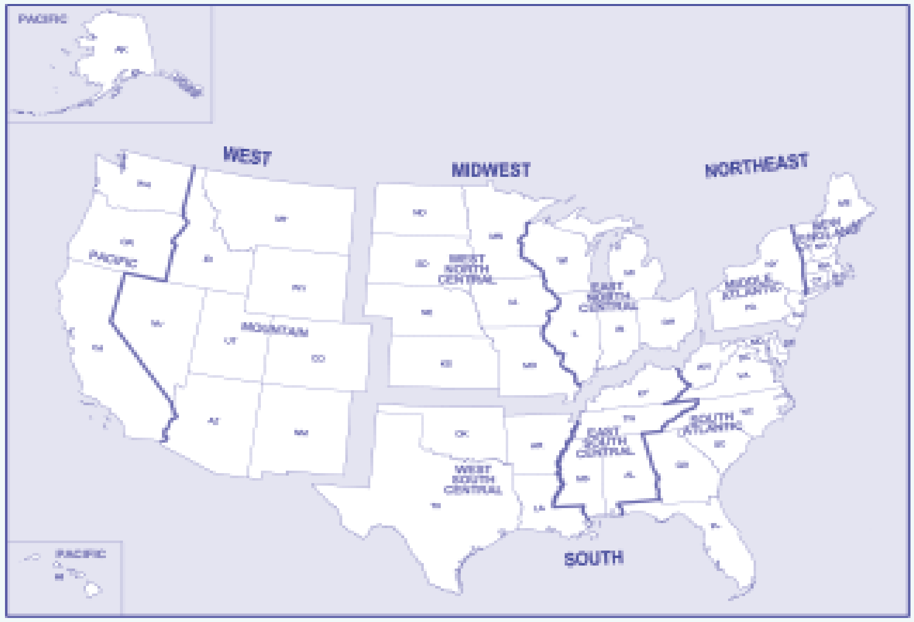
Housing Prices Jump After the Late 1990s, but Not Relative to Income



SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Labor Statistics; Bureau of Economic Analysis; and author's calculations.

Chart 3

Census Regions and Divisions of the United States



SOURCE: U.S. Department of Commerce Economics and Statistics Administration, Census Bureau.

> *In the last several years, housing prices in the New England, Pacific and Middle Atlantic subregions have risen faster than the U.S. average, creating price gaps almost as wide as those of the late 1980s.*

A second risk is that much of the strength in real estate markets has occurred in the starter-home segment, which may not show much further growth. Particularly troubling is that many first-time buyers use FHA-insured loans, whose foreclosure rates have risen to high levels. This decline in loan quality may prompt some tightening of credit standards, which could slow the starter segment. Perhaps the largest risk is that national averages mask regional differences. In particular, home prices in the Northeast and the Pacific states seem high.

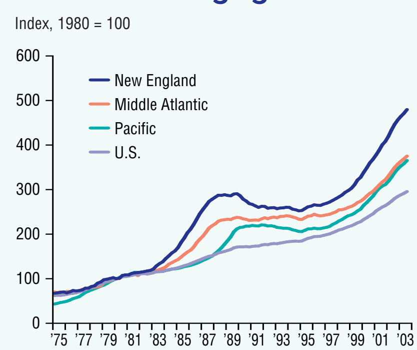
How Vulnerable Are Regional Prices?

In the last several years, housing prices in the New England, Pacific and Middle Atlantic subregions have risen faster than the U.S. average, creating price gaps almost as wide as those of the late 1980s (*Charts 3 and 4*). Much of the gap may be sustainable if there has been a long-run increase in the demand to live near the ocean. In this regard, note how the price gaps only partially closed during the bicoastal housing bust of the early 1990s. Also, zoning restrictions and other factors limit the supply of new building lots in many Northeast and Pacific areas. To some extent, the recent widening of the gaps between home prices in these regions and the nation reflected faster income growth in the Pacific states and Northeast since the mid-1990s. Consequently, home prices in these areas appear less vulnerable to decline after taking income into account.[3]

For this reason, this article assesses the vulnerability of regional home prices mainly using the ratio of home prices to

Chart 4

Is a Bicoastal Housing-Price Bubble Reemerging?

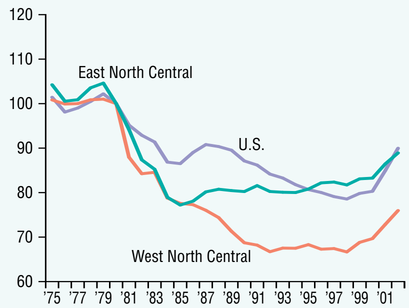


SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; and author's calculations.

Chart 5

Housing Prices Lag Income in the Midwest

Constant quality home prices/income, 1980 = 100

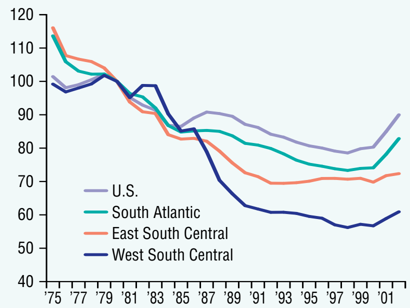


SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; and author's calculations.

Chart 6

Housing Prices Lag Income in the South

Constant quality home prices/income, 1980 = 100



SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; and author's calculations.

personal income.[4] While the ratio varies by area, the similarity of mortgage rates across the United States means that housing affordability is lower in areas where the price-to-income ratio is above the U.S. average. Differences across the four major census regions and nine subregions are notable.

Over the past two decades, Midwest housing prices have generally lagged income, following the U.S. pattern (*Chart 5*). The price-to-income ratio in the East North Central subregion has generally followed that of the United States, while the ratio in the West North Central subregion has lagged the national average.

In the South, the home-price-to-income ratio in all three subregions has lagged the U.S. average (*Chart 6*). The ratio in the South Atlantic area has kept closer to the national average, perhaps reflecting a relative increase in demand for living near ocean beaches and migration down the eastern seaboard. Prices relative to income in the East South Central area have lagged the United States' more notably than they have in the South Atlantic. The ratio in the West South Central areas trails by even more; it fell the most relative to the national ratio during the oil bust of the late 1980s. Within the area (*Chart 7*), Dallas has closely tracked the regional ratio, with Houston slightly lagging. More volatile and tech-dependent Austin outperformed the subregion during the high-tech boom of the late 1990s.

Turning to the West, the housing-price-to-income ratio in the Mountain subregion has kept pace with the United States (*Chart 8*), perhaps reflecting a larger supply of buildable land that prevents existing home prices from rising as much as in the Pacific states. By contrast, prices in the Pacific subregion have risen considerably faster than the national average, with the relative gap roughly as large as that in the high-priced years of the late 1980s.

Note how quickly the gap between Pacific and U.S. prices grew in the late 1980s and how slowly it closed in the first half of the 1990s. The sluggish downward adjustment may reflect that people who bought at the top are slow to sell out at a loss.[5] For example, during the bicoastal housing-price bust of the early 1990s, home prices fell some in the Pacific states (and Northeast). However, most of the adjustment toward more normal ratios of prices to income arose mainly from income increases, as housing prices remained stagnant to slightly down in those regions. Homes in the Pacific area may appear overpriced, but much of the gap between Pacific and U.S. price-to-income ratios may be sustainable if there has been a long-run increase in the demand to live near the ocean. In this regard, note how the fall in the Pacific ratio during the early 1990s only partially eliminated the gap with the national average (*Chart 8*).

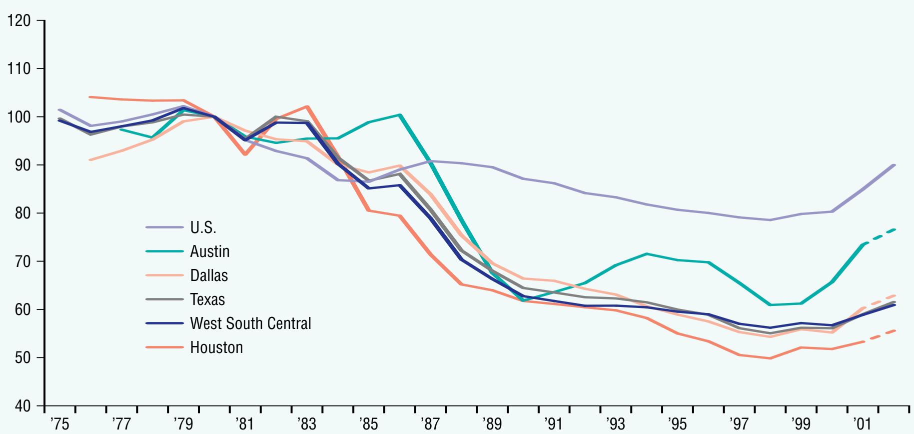
The pattern of a wider gap between Pacific and U.S. price ratios during the late 1980s followed by a narrowing gap during the early 1990s and a relative rise in the late 1990s also characterized the ratio of New England home prices to income (*Chart 9*). Middle Atlantic prices showed a similar—though more muted—pattern up through the mid-1990s but have not risen as much relative to the U.S. average as has the New England price-to-income ratio in recent years.

Even subregional averages can mask important trends. For example, the ratio in Massachusetts has risen relative to

Chart 7

Housing Prices Lag Income in the Southwest

Constant quality home prices/income, 1980 = 100

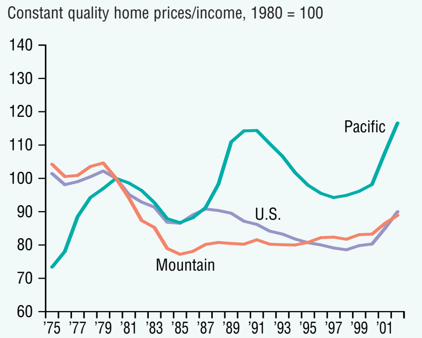


NOTE: Dashed sections of city ratios are based on estimated income data.

SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; and author's calculations.

Chart 8

Housing Prices Rise Relative to Income in the Pacific Subregion



SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; and author's calculations.

most of New England, while New York state's ratio has outstripped the average for the Middle Atlantic area, where more moderate increases in home-price-to-income ratios for Pennsylvania have held down the regionwide increases. Even within states, prices appear more vulnerable in certain cities, such as Boston and New York City.

Nevertheless, home prices may stay high relative to income and not decline until the labor market in an area begins to slow. For example, the ratio of home prices to income in the Northeast was high in the mid- to late 1980s (*Chart 9*); it fell back toward the national ratio only after the region's unusually low unemployment rate began to rise in 1988. And in the Pacific subregion, the price-to-income ratio rose relative to the United States' in the late 1980s (*Chart 8*) and did not fall back until the regional unemployment rate rose above the national rate in the early 1990s.

In reviewing the magnitude of shocks across regions, it is noteworthy that unemployment rates have moved more closely in recent years and have been dominated by the national unemployment cycle (*Chart 10*). This is in contrast to the mid-1980s through mid-1990s, when a more bicoastal pattern was apparent. In particular, the Northeast's unemployment rate had plunged well below the U.S. average by 1988, only to subsequently rise above the national average. And in the West, unemployment, which had tracked the nation's through the late 1980s, rose above the U.S. average in the early 1990s because of a combination of high costs (which induced production and employment to locate elsewhere) and defense cutbacks.

How Vulnerable Are Metro Housing Prices?

The more national cycle in unemployment poses less risk to home prices in the Pacific and Northeast areas than did the experience of the early 1990s. However, the situation warrants monitoring, because job growth across major cities has recently been weaker in high-cost, high-tech and manufacturing-oriented cities. Indeed, high-cost cities such as Boston, New York and San Francisco (*Chart 11*) have seen large percentage declines in payrolls over the past three years. Job losses have also been high in the manufacturing-oriented cities of the Midwest and in high-tech cities other than the San Francisco Bay area and Boston, such as Dallas and Denver.

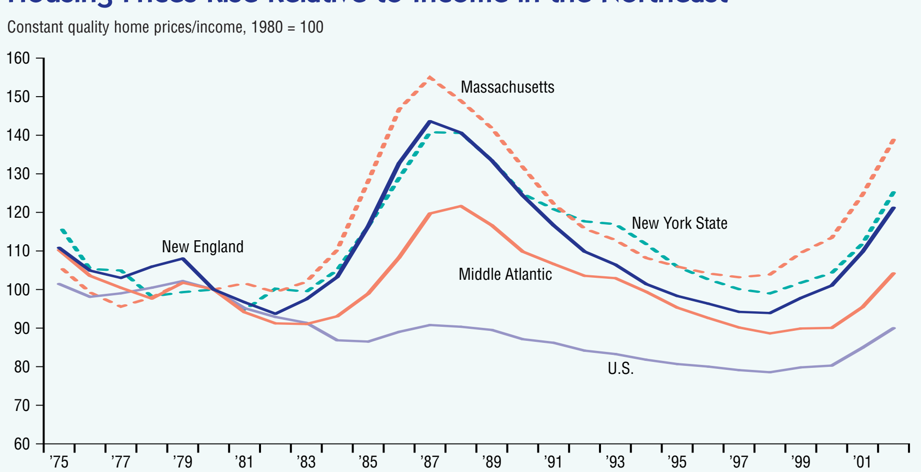
Other cities have fared better, notably low-cost cities without high exposure to the high-tech sector, such as Atlanta and Phoenix. In addition, some high-cost cities, such as Washington, D.C., and San Diego, have experienced above-average job growth in the past three years. Nevertheless, both benefited from home prices not being as high in the 1990s as other high-cost cities within their respective regions (for example, New York and San Francisco).

Another cause for concern about San Francisco, Boston and New York is that housing affordability is very low in all three cities. Affordability readings below 100 indicate that families earning the median income in these cities cannot qualify for a standard mortgage on a median-priced home (*Chart 12*).[6] Still, evidence suggests that high-cost areas can thrive if they can attract highly skilled people and adapt to changing economic conditions.[7] While Dallas has taken a disproportionate share of job losses and seen its unemployment rate rise above the national average, its home prices are not that out of line with income. This low vulnerability has limited the risks to Dallas home prices posed by higher unemployment.

Another concern for high-cost areas is that income tax receipts have fallen disproportionately more in high-tech or high-cost states, owing to greater job losses and the greater impact of stock prices on taxable income in these areas.[8] The nine states that suffered the largest percentage declines in income tax receipts between 2001 and 2002 (adjusted for tax law changes) were all either in the high-cost areas of the Northeast or California or had an above-average presence of high-tech industries. The budget restraint imposed by state revenue declines will further slow near-term growth in these areas.

Chart 9

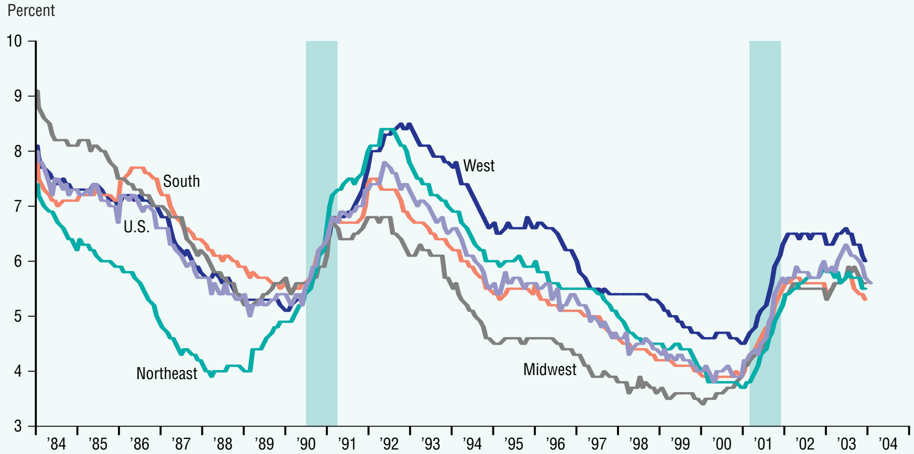
Housing Prices Rise Relative to Income in the Northeast



SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; and author's calculations.

Chart 10

Unemployment Movements Around the 2001 Recession Are More National, Less Regional



NOTE: Shaded areas indicate recessions.

SOURCE: Bureau of Labor Statistics.

Conclusion

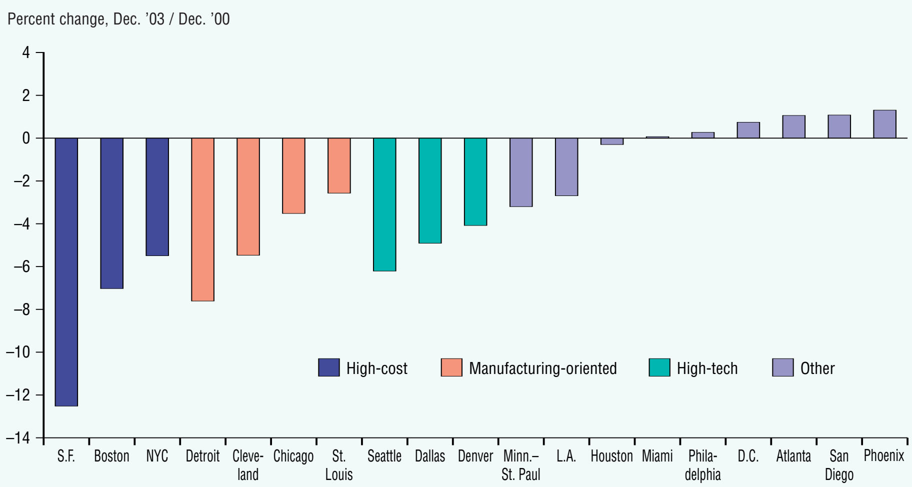
Overall, there is little risk of a national housing-price bubble. But in some cities in the Northeast and Pacific states, prices are vulnerable *if* the local economies weaken appreciably. Fortunately, the national unemployment rate is lower and increases in regional unemployment have been less bicoastal than in the early 1990s, when a recession depressed housing prices in both the Northeast and California. Still, the situation bears watching, particularly because high-cost and high-tech areas have experienced relatively weaker job growth than the nation in the past few years, and states in those areas have seen the biggest declines in state income tax receipts.

Given the economic importance of the Pacific and Northeast regions, there is some risk to how quickly the U.S. economy will recover should a downturn emerge in those areas. But even in

Overall, there is little risk of a national housing-price bubble. But in some cities in the Northeast and Pacific states, prices are vulnerable if the local economies weaken appreciably.

Chart 11

Jobs Are Weakest in High-Cost, High-Tech and Manufacturing-Oriented Cities



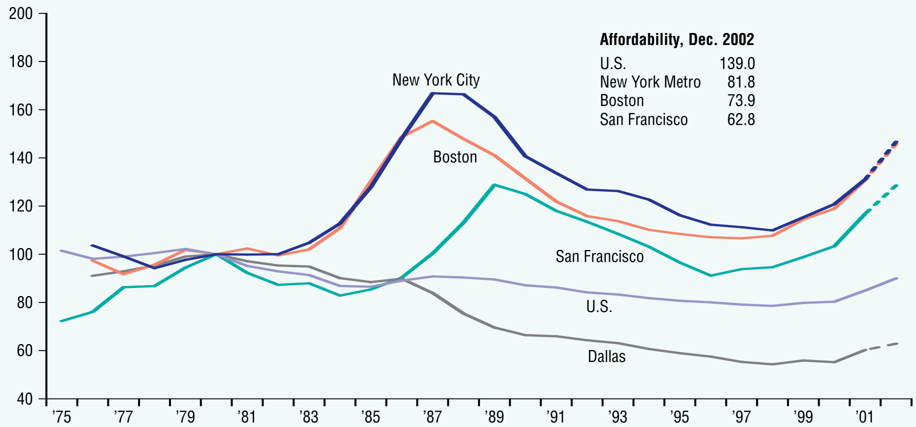
SOURCE: Bureau of Labor Statistics.

Looking ahead, housing will probably provide less of a boost to overall economic growth than in the 1990s. Fortunately, if this occurs, other factors will probably step up to boost economic growth.

Chart 12

Housing Prices Rise Relative to Income in Boston, New York City and San Francisco

Constant quality home prices/income, 1980 = 100



NOTE: Dashed sections of city ratios are based on estimated income data.

SOURCES: Office of Federal Housing Enterprise Oversight; Bureau of Economic Analysis; National Association of Realtors; and author's calculations.

that unlikely event, it is reassuring that home construction has been strongest in the South and Midwest, where housing prices have not risen out of line with income.

Looking ahead, housing will probably provide less of a boost to overall economic growth than in the 1990s, particularly because housing construction is likely to moderate and home equity withdrawals will probably slow or level off, thereby contributing less to consumption growth. Fortunately, if this occurs, other factors will probably step up to boost economic growth.

—John V. Duca

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Notes

The author would like to thank Mark Guzman, Evan Koenig and Tom Siems for comments and suggestions.

[1] See "Monetary Policy Report to the Congress," Board of Governors of the Federal Reserve System, July 2003; Glenn Canner, Karen Dynan and Wayne Passmore, "Mortgage Refinancing in 2001 and Early 2002," *Federal Reserve Bulletin* 88, December 2002, pp. 469–81; and John V. Duca, "How Vulnerable Is the Recovery to a Fall in Housing Prices?" "In Depth," Federal Reserve Bank of Dallas, October 2003, www.dallasfed.org/research/indepth/2003/id0310.pdf.

[2] See Olivier Blanchard and Lawrence Katz, "Regional Evolutions," *Brookings Papers on Economic Activity* 1992, no. 1, pp. 1–75; and David Genesove and Chris Mayer, "Loss Aversion and Seller Behavior: Evidence from the Housing Market," *Quarterly Journal of Economics* 116, November 2001, pp. 1233–60.

[3] One qualification is that if living costs rise enough in an area, the costs of conducting business there could rise, spurring companies and workers to relocate to less expensive areas. In that event, home prices might matter in addition to the home-price-to-income ratios.

[4] See "How Vulnerable Is the Recovery to a Fall in Housing Prices?" about reasons for using home-price-to-income ratios. Note that total personal income, rather than disposable (after-tax) income, is used throughout because more recent data on after-tax income estimates for regions and cities are not yet available.

[5] See Karl E. Case and Robert J. Shiller, "Is There a Bubble in the Housing Market?" *Brookings Papers on Economic Activity* 2003, no. 2, pp. 299–342.

[6] The December 2002 data shown were previously published in an article and were based on income data that were subsequently revised. Revisions are unlikely to affect the qualitative interpretation in the text.

[7] For example, see Edward L. Glaeser and Albert Saiz, "The Rise of the Skilled City," NBER Working Paper no. 10191, December 2003, National Bureau of Economic Research, Cambridge, Mass. Also see Edward L. Glaeser, "Reinventing Boston: 1640–2003," NBER Working Paper no. 10166, December 2003.

[8] See Nicholas W. Jenny, "The Personal Income Tax: Once a Strong Source of State Revenue Growth Is Now a Source of Budget Problems," *The Rockefeller Institute State Fiscal News*, April 2003, www.rockinst.org/publications/fiscal_studies/SFN%203-3.pdf.