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## **ARE WE IN A HOUSING BUBBLE THAT IS ABOUT TO BURST?**

By Len Bogorad, Managing Director

Is the U.S. in a housing market bubble that is about to burst?

This bubble question has provoked great interest in the business and popular press, with articles in publications as varied as *The Economist*, *Newsweek International*, *Business Week*, *Washington Monthly*, *The New Yorker*, *The New York Times* and *Business Week* proclaiming that disaster will soon be upon us. Economists have jumped into the fray and produced a number of thoughtful studies. Unfortunately, there is no consensus—these analyses have come to a wide range of conclusions. For example, two studies by Federal Reserve economists have been released in the past few months, one very optimistic and one much less so, probably contributing to Greenspan's recent statement that it is impossible to take a firm stand on whether or not there is a housing bubble.

And *The Coming Crash in the Housing Market* by a former investment banker at Goldman Sachs, John Talbott, concludes that we are not only about to see a burst housing market bubble, but that it will bring the entire economy down with it. Stephen Roach of Morgan Stanley and some other leading economists have similar fears.

Concerns about a bubble center on the remarkable run-up in housing prices in some areas, the high volume of new and existing home sales, the understanding that the hot market has been driven by historically low interest rates, and expectations that mortgage rates will be rising. The increasing amount of investor interest in housing and the high level of household debt heighten this fear.

### **OUR CRYSTAL BALL**

Most economic forecasters expect the economy to improve over the next several years, with job growth forecast to run between 150,000 and 250,000 per month, an annual increase of 1.4%-2.3%. Interest rates are predicted to move up gradually along with strengthening economic conditions and job growth. In all likelihood, it appears that average mortgage rates will not exceed 8% in the foreseeable future, and it is even less likely that they will top 9%.

Based on this forecast, we predict that U.S. housing markets will continue to be healthy during this period, without the burst bubble that the prophets of doom are anticipating. We do believe it is prudent to plan for more modest price increases during the next few years than have been experienced in many areas during the past few years.

Over the longer term—the next 10 years or so—we expect housing starts to be very strong. We anticipate that housing prices will, on average, increase 2-3% faster than inflation each year, and at even a greater rate in supply-constrained markets.

Why do we come to these conclusions in the midst of so many dire predictions?

### **STRONG DEMOGRAPHIC UNDERPINNINGS**

First, demographic trends certainly don't indicate that we're headed for a crash. The longer-term prospects for owner-occupied housing are outstanding, based on recent studies by the Joint Center for Housing Studies of Harvard University and the Homeownership Alliance (a joint effort of economists at Fannie Mae, the National Association of Realtors, Independent Community Bankers of America, Freddie Mac, and the National Association of Home Builders).

Recently revised Census Bureau forecasts predict more population growth over the next 10 years than had previously been expected. Census Bureau projections released in 2000 forecast a population increase of 24.6 million people between 2000 and 2010. The interim projections released in March 2004 forecast growth of 26.8 million during this same period, an increase of 2.2 million (more than 8%).

Furthermore, if immigration continues at its current pace, these forecasts could prove low. Net immigration since April 2000 has averaged about 1.3 million per year, compared with about 1.05 million per year in the 1990s. At 1.3 million, the current rate of immigration is far above the rate of 893,000 per year assumed in the March 2004 Census Bureau interim projections. Immigration could well continue to exceed these forecasts because the U.S. is likely to experience a shortage of working-age population as more boomers enter traditional retirement ages.

Among other benefits, immigrants will help to compensate for the projected decline in 35-44 year old households that will be occurring over the next 10 years as a result of the 1965-1980 baby bust. This generation -- Generation X -- will be in its prime home buying age range over the next 10 years.

As for the Boomers, they will continue to account for the largest household growth. They will age into their 50s and 60s in the coming decade, fueling demand for housing to fit their evolving lifestyles. Furthermore, their many children, the Echo Boomers or Generation Y, will enter the housing market in the coming ten years, fueling demand first for rental apartments and then for owner-occupied housing as they mature and achieve higher incomes.

Taking all of these factors into account, the Homeownership Alliance makes a persuasive case that annual demand for new housing over the next 10 years is likely to be greater than over the past 30 years. Growth in demand for second homes, driven largely by increasingly wealthy Boomers, will also be a significant contributor to demand for new housing. So will the need to replace more of the increasingly aging housing stock, whose median age has increased from 25 years in 1990 to an estimated 32 years currently, which may be the oldest in U.S. history. Over the next decade, the median age of housing units is expected to increase to 37 years despite a projected increase in removals from 360,000 to 400,000 annually.

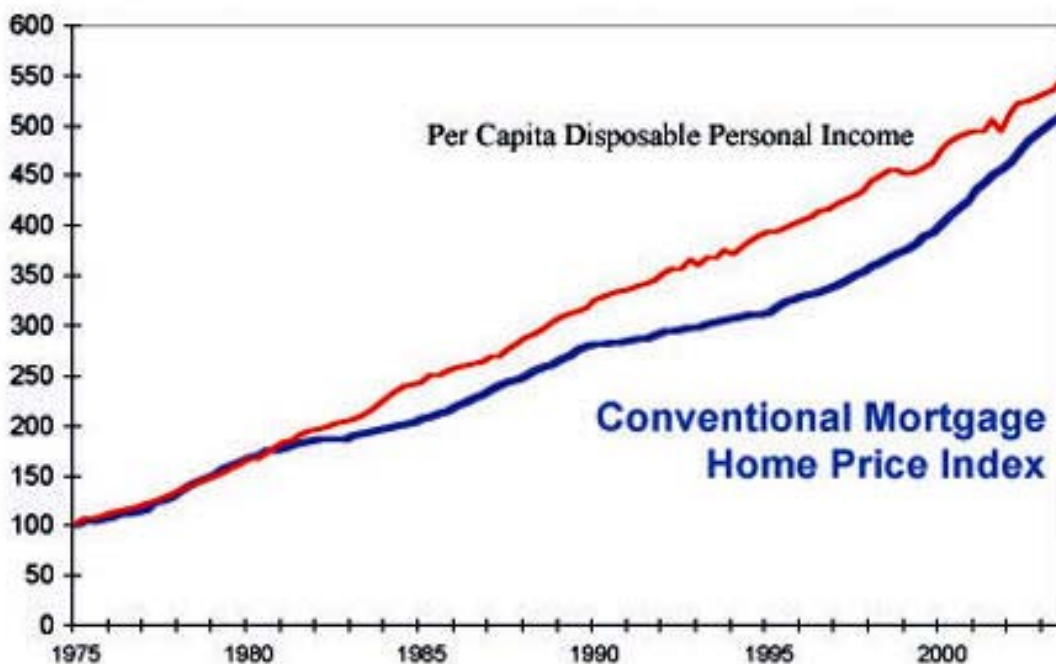
According to the Homeownership Alliance, over the next decade the higher rate of household growth, along with increased replacement requirements, second home demand and changes in vacancies, will require average production of 1.85 to 2.17 million new housing units per year. Even the lower end of this range is above production levels of recent decades.

### **CURRENT SITUATION GENERALLY CONSISTENT WITH FUNDAMENTALS**

In the second quarter of this year, average U.S. home prices increased 9.4% from the second quarter of 2003, the largest increase since 1979, according to the Office of Federal Housing Enterprise Oversight. By some measures, prices have increased faster than incomes in recent years. However, as shown in the following graph prepared by the Homeownership Alliance, over the past 25 years price appreciation has lagged income growth. In many markets, home prices are generally still in line with incomes once low mortgage rates have been taken into account.

#### **U.S. Home Price Appreciation Has Lagged Income Growth Over the Past 25 Years**

1975 = 100

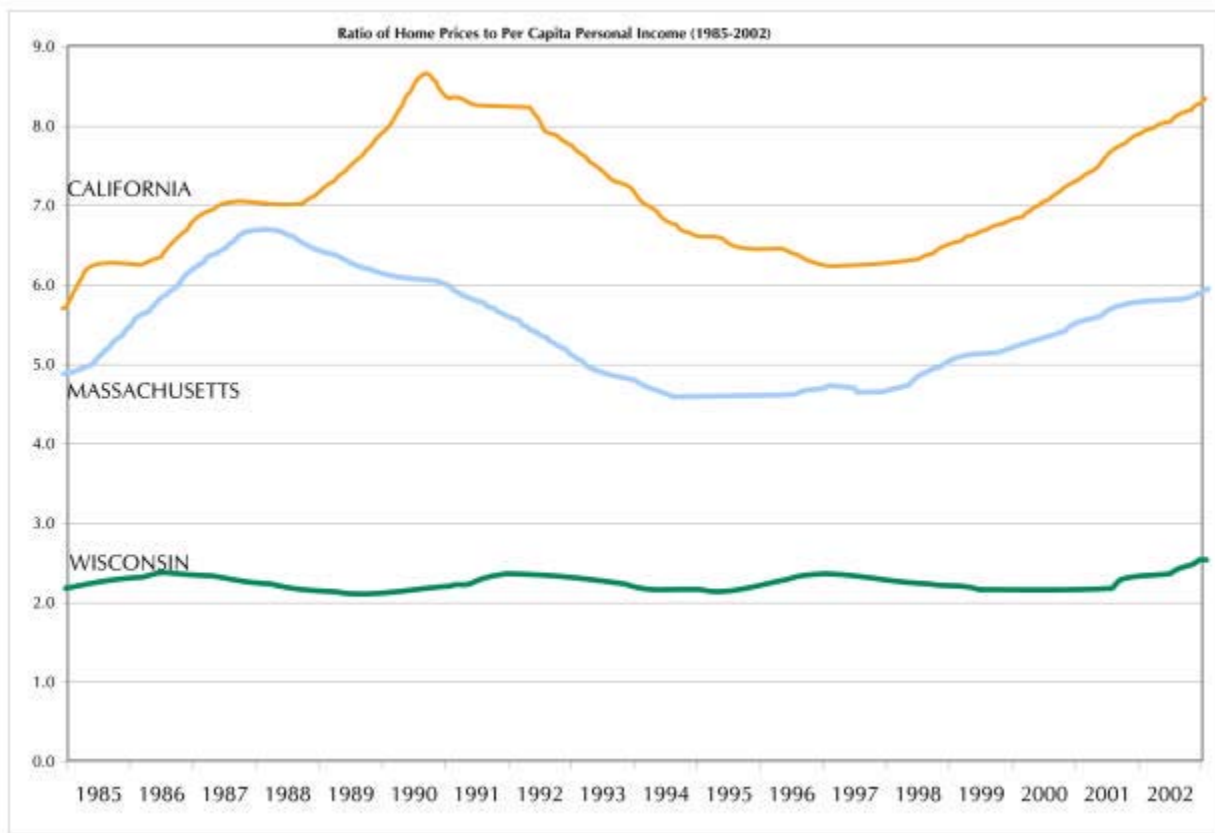


Sources: U.S. Bureau of Economic Analysis and Freddie Mac

This is particularly true when the quality of homes Americans have been buying -- including size, air conditioning, and other features -- is taken into account. Adjusting for quality changes, homes are much cheaper than in the past in the U.S., and this would be true even with moderate interest rate increases, according to a recent study by two Federal Reserve economists, Jonathan McCarthy and Richard Peach.

The reality is that in many markets, housing affordability remains in line with incomes. Karl Case and Robert Shiller have demonstrated that in many states the ratios of average home prices to per capita personal

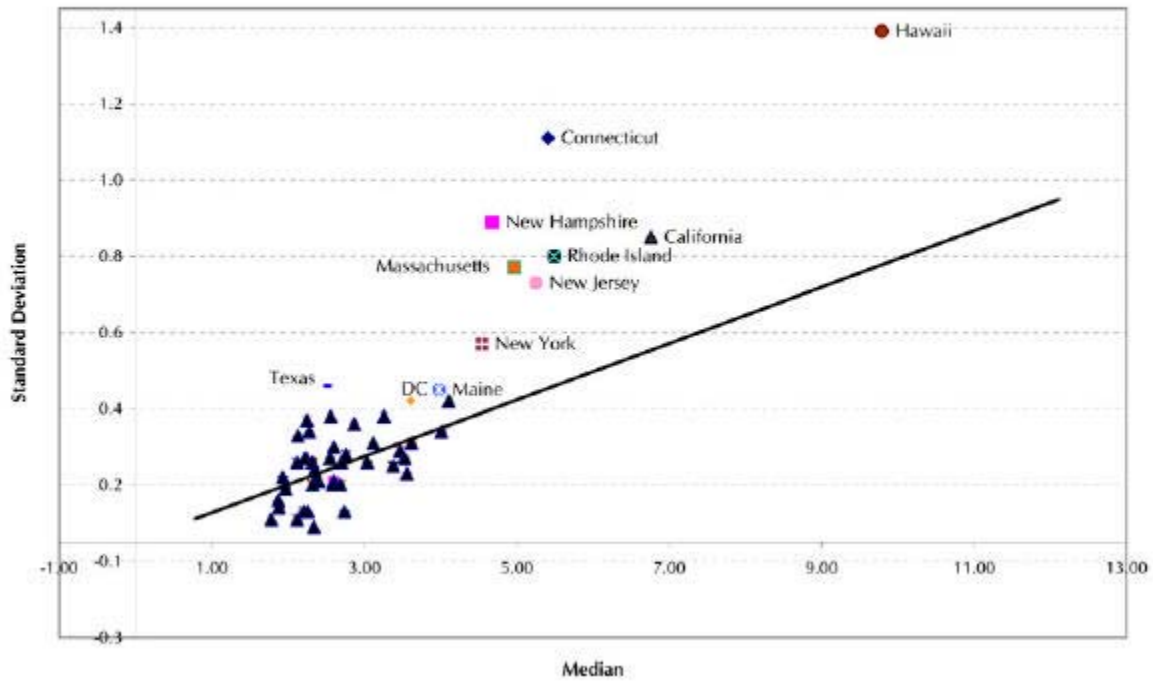
incomes have remained remarkably stable. For example, in Wisconsin this ratio has stayed between 2.1 and 2.4 for 18 years.



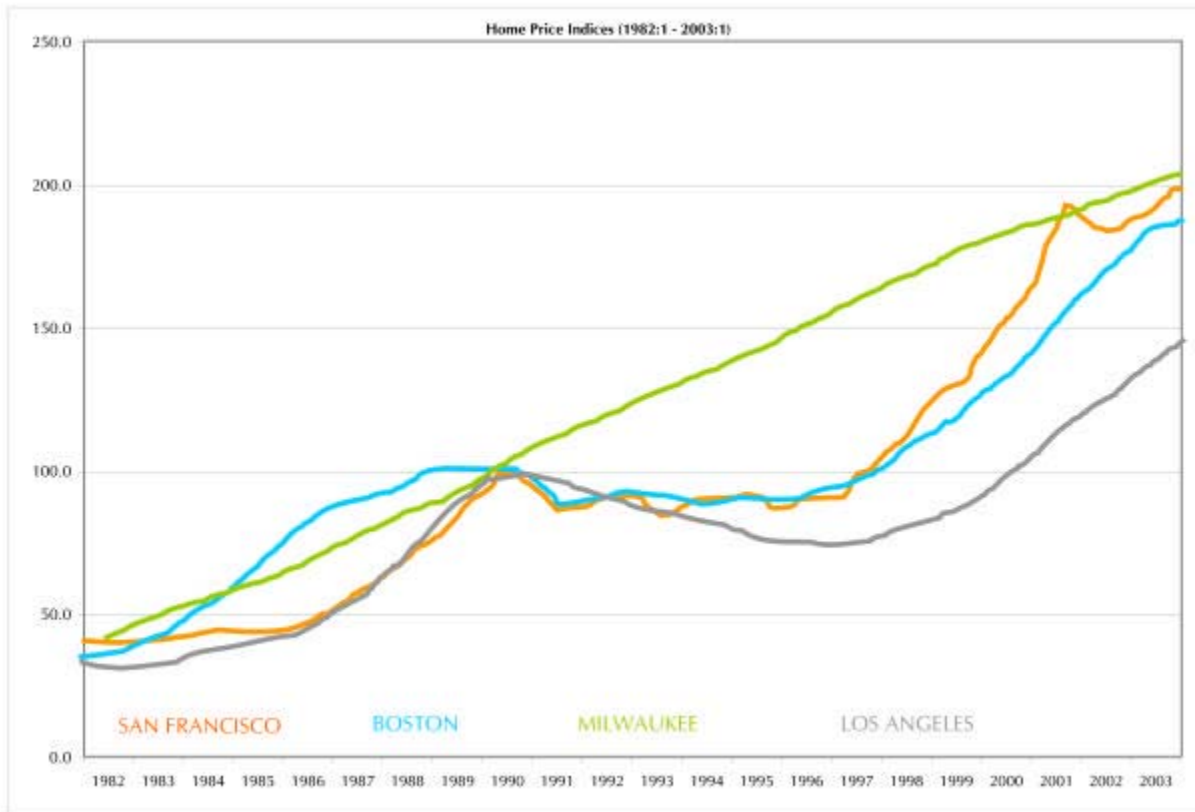
While some markets such as Florida and the Washington, D.C., area, have experienced rapid price increases, housing in these markets will remain quite affordable relative to incomes even if interest rates increase.

To be sure, other markets, particularly in California, New England and New York/New Jersey, have much higher price-to-income ratios and have experienced more volatile relationships between prices and incomes, as measured by standard deviation. (Unlabeled triangles on the graph are states with lower price-to-income ratios and less volatility relationships between prices and incomes).

House Price to Per Capita Personal Income (1985:1-2002:3)



When these economies grew rapidly in the 1980s, the home price to income ratios rose to very high levels, only to be followed by sharp drops that resulted in prolonged housing market problems when their economies faltered. Prices have increased steadily in Milwaukee while they saw dramatic ups and downs in San Francisco, Boston and Los Angeles. Los Angeles' downturn in the early 1990s was so pronounced that home prices doubled between 1990 and 2003 in Milwaukee while only increasing by about 50% in Los Angeles.



Price/income ratios in these markets have returned to the high levels of the late '80s, and they are arguably the markets most susceptible to a bursting bubble. But these markets are severely supply constrained, and their housing is never “affordable.” In many ways, their high prices—absolutely and relative to incomes—are a product of anti-growth constraints that will only worsen over time, forcing buyers to choose between higher prices and extremely long commutes. Homebuyers’ choices are being made even more difficult by the strong anti-growth attitudes of many jurisdictions at the edge of suburban growth, resulting in leapfrogging of development many miles farther out than would otherwise be necessary.

Overall, the hottest markets – those that experienced home price increases of 15% or more in the year ended June 2004 – accounted for 17% of U.S. housing construction. In contrast, 71% of permits were issued in markets where prices increased by less than 10% during this period.

### **BURST BUBBLES UNLIKELY WHEN THE ECONOMY IS GROWING**

In addition, a housing price correction is unlikely as long as underlying economic conditions are healthy. Bubbles have burst in the past only when the economy deteriorated rapidly in a particular part of the country. Poor housing market conditions have been most correlated with sharp drops in employment, and employment is expected to increase over the next few years. Although we don’t expect it to happen, if the economy does decline, the Federal Reserve will most likely drop interest rates again, and housing could actually benefit as it did in the past few years.

## **CURRENT MARKET INDICATORS ARE NOT CONSISTENT WITH A BUBBLE**

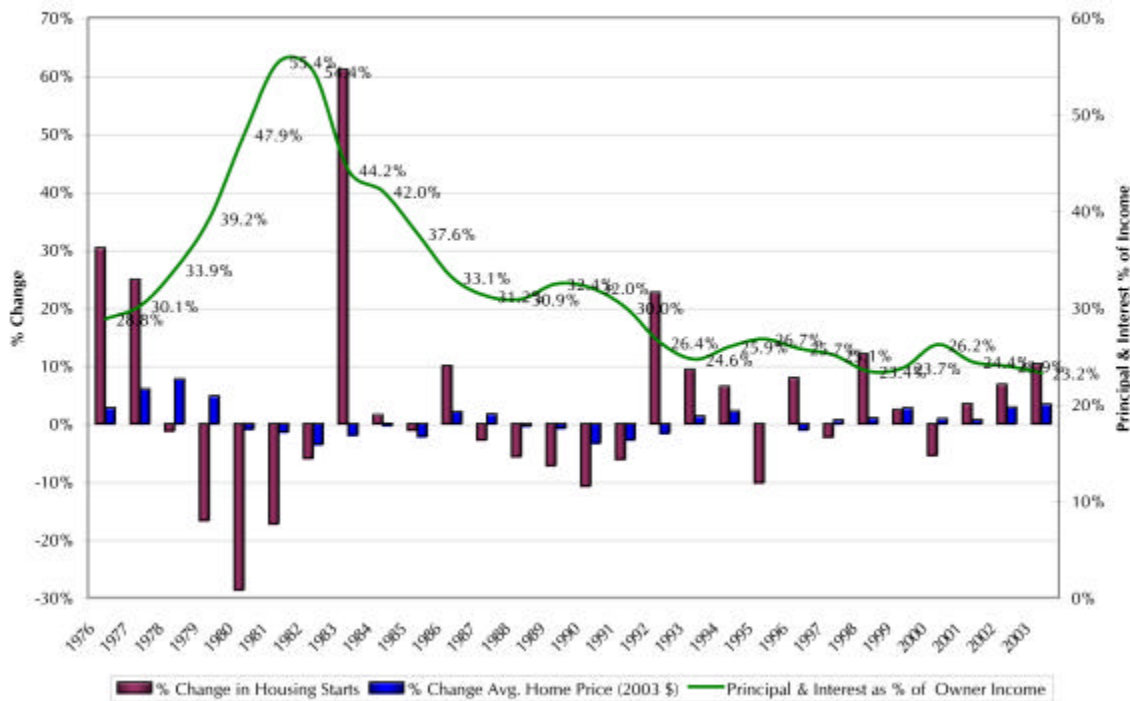
Furthermore, current supply and demand dynamics are not consistent with a bubble, at least not for the time being. The inventory of unsold homes is low, particularly in the most supply constrained, least affordable markets that might seem at most risk of price corrections. If these markets were behaving normally, builders would be rushing to supply homes to take advantage of the red-hot market. But growth controls have made this impossible, lending additional credence to our belief that the price increases fed by low interest rates have been abetted by anti-growth policies that are unlikely to ease up, particularly with an improved economy.

## **CURRENT PRICES CAN ABSORB HIGHER MORTGAGE RATES**

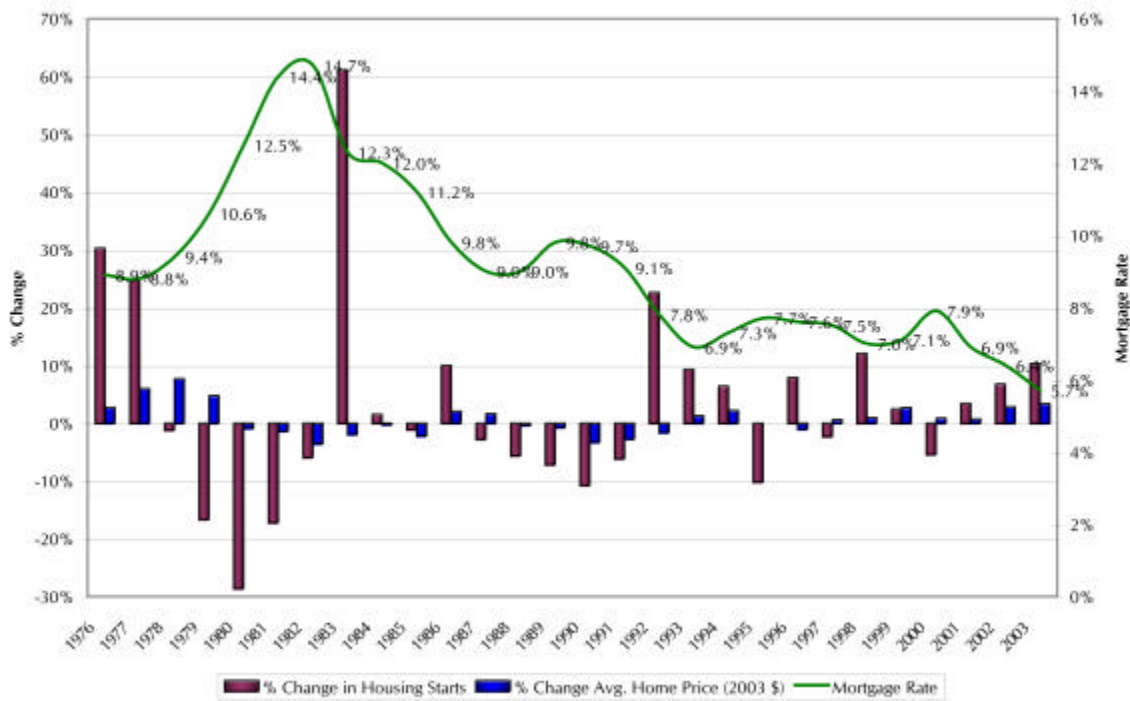
Above all, assuming the economy creates more jobs and personal incomes increase, as most economists predict, U.S. housing markets can absorb the anticipated higher mortgage rates without a sharp drop in home sales or prices. This is particularly true given the combination of strong household growth, which will only increase with a growing economy, and constraints on supply. Both of these factors would tend to lead to households spending more money on homeownership. Furthermore, as the Joint Center points out, fewer homes will be put on the market if interest rates increase because it will be a less attractive time for homeowners to move. This will reduce inventories of resale homes and help to keep prices up.

The following exhibit shows principal and interest as a percentage of median owner income for a household buying the average price new home with 10% down. Since 1975, in most years when the percentage was below 30%, housing starts increased and the average new home price increased faster than inflation. In contrast, in most years that the indicator was above 30%, housing starts decreased and/or average home prices declined in constant dollars. Looked at another way (as can also be seen on the next exhibit, starts, and new home prices in constant dollars, have generally increased when interest rates were below 9%, and one or both have generally decreased when interest rates were above 9%.

Housing Market Sensitivity to Mortgage Rates 1976-2003



Housing Market Sensitivity to Mortgage Rates 1976-2003



In 2003, when mortgage rates averaged 5.7%, the ratio of principal/interest to income was only 23.2%, the lowest since at least 1975. This percentage will likely go up as interest rates increase. But as long as interest rates increase to no more than 8.2% to 9.2%, depending upon how much incomes increase, this percentage will stay below 30%. Furthermore, as interest rates rise, the use of ARMs will undoubtedly increase, keeping the average mortgage rate lower than it would otherwise be. From 1963 to 2003, mortgage rates averaged 8.54%, and in all likelihood, as noted earlier, they should not exceed 8% in the foreseeable future and are even less likely to top 9%. So a significant correction in home prices or dramatic decline in sales is unlikely.

	2003	Income & Price Constant			Income +5% & Price Constant			Income +10% & Price Constant		
		100 BP	200 BP	250 BP MAX	100 BP	200 BP	300 BP MAX	100 BP	200 BP	350 BP MAX
Average New Home Price 1/	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000	\$195,000
Mortgage Rate 2/	5.7%	6.7%	7.7%	8.2%	6.7%	7.7%	8.7%	6.7%	7.7%	9.2%
Median Income of Owners 3/	\$52,620	\$52,620	\$52,620	\$52,620	\$55,251	\$55,251	\$55,251	\$57,882	\$57,882	\$57,882
<i>P&amp;I as % of Owner Median Income</i>	23.2%	25.8%	28.5%	<b>29.9%</b>	24.6%	27.2%	<b>29.9%</b>	23.5%	25.9%	<b>29.8%</b>

1/ NAHB

2/ Federal Home Finance Board

3/ Current Population Survey

## PRODUCTS AT GREATER RISK OF A PRICE CORRECTION

There is a somewhat greater risk of a price correction in extremely hot condominium markets. Condos have attracted many investors, as well as discretionary buyers who would opt to remain as renters or empty nest owners of single-family homes if they sense that condos are no longer a great investment. Condos that are readily put on the rental market have been particularly popular with investors, and in some markets supply has been increasing very rapidly. The counterargument is that in some high-price metro areas, condos are the only form of new housing that is affordable (if only because of small unit sizes) to many young professional buyers. Furthermore, demographic trends, including the rise of singles and childless couples, Gen X preferences for urban living, and demand from empty nester boomers, are conducive to condo sales. So far, it appears that the rate of construction of new condos is generally well below the growth in households who prefer the condo lifestyle—young singles and couples, urban dwellers, empty nesters, etc.

Second homes in some market areas may also be at greater risk because of their historical volatility, the discretionary nature of the purchase decision, and the high concentration of investor buyers. However, this may be outweighed by the strong demographic support for these purchases from Boomers.

## RISK FACTORS

The most pessimistic observers argue that consumer spending and debt levels have reached unsustainable heights because homeowners feel buoyed by the paper gains on their residences. They note that homeowners have taken out high mortgages and second mortgages, spent more than they should because their high home values make them feel wealthy, and increasingly relied on ARMs even when fixed-rate mortgages are near record lows. These observers contend that this may lead to major problems at Fannie Mae, Freddie Mac and in the private mortgage insurance industry, and nip a fragile economic recovery in the bud while having a devastating effect on housing prices and sales.

Is this pessimistic scenario—or, more likely, a comparatively modest price correction—possible? Certainly. Some fine studies by credible economists predict these outcomes, and one can certainly make good cases for them. And, to some extent, we are entering into uncharted waters for the U.S. economy. Continuation of

the economic recovery is hardly assured, so while we might see continued low interest rates, job markets could stagnate, particularly if there is another major terrorist attack. Interest rates could conceivably climb even without substantial economic growth because of rising inflation and high federal budget and trade deficits. Sharp restrictions on immigration would result in much lower housing demand.

However, on balance, we believe that the scenario we have set forth in this article is far more likely, as long as mortgage rates stay at less than 9% and economic growth continues, as is generally anticipated. Of course, enough doom and gloom talk might drive buyers to stay out of the market, becoming a self-fulfilling prophecy.

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