

# FRBSF WEEKLY LETTER

January 4, 1991

## Why Home Prices Don't Fall (Much)

Recent magazine articles and stock analyst reports have offered dire forecasts of coming declines in home prices, particularly in "over-priced" markets such as California. Residential real estate is an important component of household wealth portfolios and serves as collateral for about 23 percent of commercial bank assets. Hence, home price trends influence consumer buying behavior, and the soundness of the banking system.

This *Letter* takes issue with the picture of the California housing market offered in the popular press. Neither theory nor data support the notion of an impending "bust" in housing prices. In addition, the relatively high home prices in California are easily explained by the comparative productivity of sites in that state, and thus do not portend special problems.

### Forecasters of gloom

Underlying the debate over housing values are several highly publicized reports forecasting significant weakness in real estate markets, especially California. A report by two New York stock analysts, Salem and Wang, for example, predicts a decline of 25 percent or more in California home prices by mid-1991. A recent *Forbes* article argued further that high home prices in California were propelling activity out of the state. Some analysts believe that this will hasten the decline in home prices.

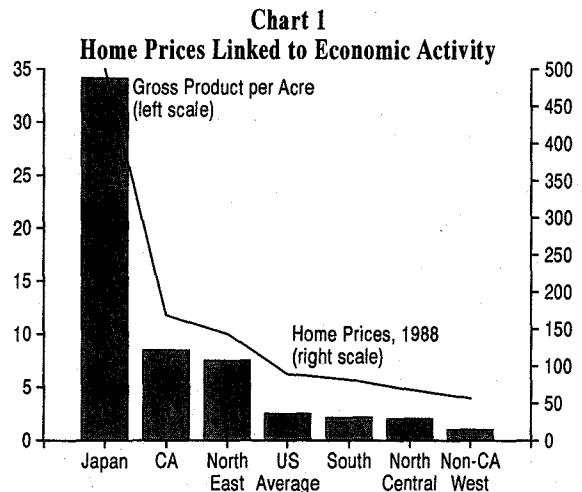
The analysts making these judgements seem to rely on several arguments. First, they claim that housing prices in California are so much higher than elsewhere that prices "will have to fall" to get back in line with other regions. Second, they assert that home prices in California have risen so much in recent years that a decline is inevitable. In the words of Salem and Wang, "(A) huge rise equals a huge potential fall." Third, as home prices decline, they believe that household perceptions of wealth also will decline, causing even greater home price declines. We will address these observations in turn.

### Housing values and economic activity

Home prices do indeed vary significantly across the United States, and California home prices are high relative to prices in other states. On the basis of median sales price, California homes are at least 95 percent more costly than the U.S. average. Although there are regional variations in construction costs, tax policies, and operating costs, the main reason for the difference is the comparative cost of residential building sites in California relative to other locations.

The variation in site values across the U.S. has a simple, economic rationale. In economic parlance, sites are production factors that are in fixed supply. As a result, differences in their productivity are "capitalized" into differential site values. Empirically, rough measures of comparative site productivity, such as gross economic product per usable acre, easily explain the differences in home prices across the United States and other countries.

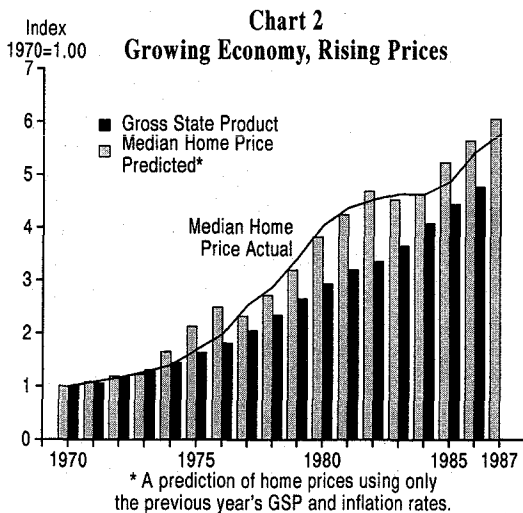
Variations in gross state product per (non-Federal) acre, for example, explain much of the regional home price variation in the U.S. (Chart 1). Even the seemingly astronomical Japanese home



# FRBSF

prices have an explanation in the extraordinary productivity of usable sites in that country.

Similarly, trends in the productivity of sites explain much of the path of home prices over time. In California, for example, trends in the gross state product (GSP) explain the bulk of the sixfold increase in home prices that has occurred over the last 20 years. The association is not a simple one-for-one relationship, of course, because tax policy and changes in inflation expectations have influenced the comparative attractiveness of holding housing versus other assets. But GSP and inflation factors together explain essentially all of the observed variation in California home prices in the available data period from 1970 to 1987 (Chart 2).



This suggests that a significant downturn in California home prices would require a significant downturn in the California economy, or a period of deep deflation in general prices. Empirical work conducted at the Federal Reserve Bank of San Francisco suggests that Salem and Wang's forecast of a 25 percent decline would require an even larger absolute decline in California's nominal gross state product. It is unlikely that the analysts are embracing such a forecast.

Neither is an abrupt diffusion of activity to other areas likely to depress demand for California sites, as some other analysts have asserted. As home prices have risen in California and other dynamic areas of the nation, there is no doubt that, for certain types of activity, the comparative

attractiveness of lower-cost areas elsewhere has increased. The coastal areas of California have virtually no land-intensive, heavy industrial activity, for example, because cheaper sites elsewhere in the nation are apparently close substitutes.

Many activities, however, need proximity to the special agglomerations of activity represented by California, New York, and other high-productivity regions. For them, the profitability of those locations outweighs the costliness of the sites. Thus, while some selective diffusion of activity will occur over time, there is no reason to expect a securities-like arbitrage process to equalize site values abruptly. Unlike securities, sites are not homogeneous or easily moved into new users' portfolios.

## No housing bubbles

The second assertion, that home prices must fall simply because they have risen so much, also does not survive careful scrutiny. This is tantamount to asserting that large "bubbles" in home prices can exist, only to burst serendipitously at some point.

Since fundamental factors such as aggregate regional economic activity can easily explain housing prices, there is little reason to embrace notions of price bubbles. In addition, the conditions under which asset price bubbles conceivably may arise are very unlike the conditions in the housing market. In particular, pure price bubbles (that is, nonfundamental price movements) are thought to involve only certain types of assets. In particular, to hold an asset whose price may "burst" at any time, rational market participants must presumably believe that they can sell the asset quickly and cheaply before its price turns down. Most financial economists question whether even this condition is sufficient to generate noninstantaneous bubbles. In any case, we can hardly consider housing to be a highly liquid asset with low transactions costs.

## Falling prices

Finally, housing pessimists believe that the recent softening of home prices will snowball as households feel their wealth progressively compromised by falling home prices. A weakening economy would, of course, cause the demand for sites to weaken accordingly; serious recessions can even cause nominal home prices to fall.

---

However, historically, home prices have been surprisingly resilient to economic downturns.

Even during the Great Depression, home prices declined at most in proportion to the declines in the economy as a whole. One multi-city price series, for example, showed a 28 percent decline when nominal per capita incomes declined by about 32 percent. A series based on prices from Washington, D.C., that implicitly controlled for housing quality, showed a decline of only 20 percent.

The experience of home prices in Texas after the collapse of oil prices in the 1980s offers a more modern example of price movements under extreme economic conditions. Employment in Texas declined by about 3 percent after the oil price problems of 1982–83; real income likely fell by more. Home prices fell roughly by an amount (3 percent) that was, at most, proportional to the total decline in economic activity. Even in Houston, whose economy went from boom to bust (with an absolute decline in real activity that likely approached 20 percent), there was no evidence that home prices spiraled downward by more than the decline in local economic activity.

#### **Home price resilience**

Important asymmetries in the transactions cost of selling into a down, versus an up, market may further strengthen the resilience of home prices, compared to, say, stock prices. Tax considerations may be partly responsible. For example, capital gains in housing are free from tax for most households, whereas losses experienced in residential housing sales are not tax-deductible. Capital gains tax policy therefore treats housing favorably relative to other assets when the sale generates a gain, but relatively unfavorably when the sale generates a loss.

Tax policy also tends to retard the dumping of houses and mortgages on lenders. In addition to the cost of an impaired credit record, a household that walks away from its mortgage must pay income tax on the full amount of the debt forgiveness implicit in the default.

Finally, the behavior of the rental market may retard sales in down markets. Falling home prices by themselves, of course, would tend to lower rental prices. However, the slower expected rate of appreciation effectively raises the landlord's cost of doing business, and causes at least partly offsetting increases in rental prices. As an empirical matter, rental prices actually increased in the last three recessions (1970, 1974, and 1982) even as home prices softened.

#### **The effects on the economy**

These market asymmetries maintain the demand for housing in a downturn despite expectations of severely compromised income, and thereby preserve home prices. Certain local markets, of course, may experience exaggerated weakness in prices, particularly if cash-strapped new developments are prominent. A broad crash in real estate prices, however, is very unlikely, even if the economy has entered a recession.

The stability of home prices is not entirely good news, of course. The very household behavior that preserves housing values is likely to exaggerate the effects of an economic downturn on other sectors. To continue shouldering its housing expenses, a household with compromised income must make disproportionate adjustments in spending elsewhere.

**Randall Johnston Pozdena**  
Vice President

Research Department  
Federal Reserve  
Bank of  
San Francisco

P.O. Box 7702  
San Francisco, CA 94120