

ARE THERE HOUSING BUBBLES? AND IF SO WHERE?

Open the business section of the newspaper these days and you're sure to come across a headline about the much feared "Housing Bubble." Real estate, and more specifically the housing market, has become a favorite topic among journalists, economists, and just about everyone. But what exactly is a housing bubble, or any 'bubble' for that matter? And do we need to prepare for an imminent burst?

BY SARAH KUNKLEMAN

Richard Green, is the Business School's Oliver T. Carr, Jr., Chair of Real Estate Finance. He researches real estate, housing markets, housing policy, tax policy, and home ownership. Comparing the country's regional housing markets, Green has identified several trends in housing prices and offers some explanations as to whether a bubble exists and if so where.

Real house prices decreased from 1945 to 1975, but in the 1990's house prices in the United States rose 14 percent in real terms. Today the real house price is well above the historical trend line; the market experienced seven percent growth in 2004 alone. This is what has produced 'bubble-talk.'

“**T**he simple explanation of a bubble is a condition that exists when prices can’t be explained by fundamentals,” says Green. “Experts debate whether there has ever been a true ‘bubble’, but often cited examples include Dutch tulips, Beanie Babies, and the NASDAQ at 5000; all are items that did not reflect the asset value of cash flows.” Fundamentals in the housing market are building cost and land value—a function of land rents, capital costs, and taxes.

House price growth trends vary across the country. Green says, “For typical price movement look to the heartland. Comparing New York City, Chicago, and Syracuse with the national trend line, we see New York well above the line, and Syracuse well below the line. Chicago, however,

is only slightly below the trend line; price movements in Chicago historically have followed the national trend.”

The Fundamentals: A Closer Look

In general, the market has seen an increase in building costs due to the rising domestic and global demand for base building materials, such as lumber, concrete, and steel. In addition, consumer demands for quality have increased. “Today’s home owners want better quality when building a new home,” says Scott Lutz, B.B.A. ’96, director of finance and operations for Marquis Custom Homes. “Many building materials are now structurally engineered to produce higher quality products that require less maintenance in the long-term.” For example, Hardie Plank siding and other similar composite materials have replaced cheaper materials, such as vinyl siding and materials that require more maintenance, such as wood trim. Lutz also sees increased demand for quality of life options such as elevators as well as digital and wireless connectivity.

There are exceptions to the fundamental rule when looking at rare items that carry intrinsic value. Think vintage wine and Monet paintings. In terms of real estate, coastal property and much sought after urban locations can be said to be rare and carry intrinsic value, thus eliciting higher prices. For example, construction costs in New York City are twice those in Alabama however, a home will cost you eight times more in New York City.

Looking at land rents, some parts of the United States clearly outpace others. Why, for example, are land rents so much more expensive in New York,

San Francisco, and Washington, D.C., as compared to the sunbelt cities— Dallas, Houston, and Phoenix? Richard Green offers one explanation: “Agglomeration. Basically all locations are the same in sunbelt cities. There is no real center-city in these locations. The suburbs spread far and wide, each having generally unique characteristics, but these are barely distinguishable to outsiders.”

Also, development is considerably cheaper in sunbelt cities because local governments haven’t imposed stringent building restrictions.

A study has shown that 84 percent of firms that left New York City prior to September 11, 2001, have now moved back into the city. The attraction to New York City is its knowledge-intensive environment that financial firms find valuable. Likewise, San Francisco excels in human capital and Washington, D.C., offers proximity to the government and related agencies. It can be said that the benefits of being close to other players in the given market – the cluster theory proposed by Michael Porter – offset the higher premiums for real estate.

Buy versus Rent

Another way to determine if housing prices have climbed too far above fundamentals is to look at residential rents. You have to live somewhere, and the choice is whether to rent or buy. In the paper “Did Changing Rents Explain Changing House Prices During the 1990’s?”, co-authored by Green, Yan Chang and Amy Crews Cutts, it is stated that, “In equilibrium

house prices should be equal to the present value of the discounted stream of rents earned by the house.” In the long-run experts would expect to see house price growth equal rental price growth.

To accurately compare buying and renting, one must look at the cost of capital, which is dependent upon interest rates and taxes.

Mortgage rates have been at historic lows in the last few years. The average rate in 1990 was 10.1 percent with 2.0 origination points and in 2005 the average rate dropped to 5.75 percent with 0.6 points; today’s rates are a little more than half the rate in the 1980’s.

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In addition, many new financing options have emerged in the market, such as interest only and adjustable rate mortgages. “New financing vehicles have allowed people



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to stretch,” says Lutz. “Many home buyers can now build their dream home much earlier in life than they would have been able to with traditional finance products.”

For many people these options make good financial sense. For instance if you plan to sell the home before the payment would increase or if you have a well-paying job, a family at home, and just not a lot of extra

cash, then an interest-only loan or adjustable rate loan may be the most logical choice. On the other hand, if people fail to take into account that there could be a payment shock when their loan adjusts, Green says, “They could be placing themselves in a precarious financial position by taking a teaser-rate loan.”

In addition, owner-occupied housing has a lower after-tax cost of capital than renter-occupied housing. There are two reasons for this. First, regulators allow banks and government sponsored enterprises to hold less capital against home mortgages than income property mortgages. Second, the mortgage interest deductions and the non-taxation of rents owner-occupiers pay to themselves give owner-occupation a big tax advantage over renters.

There are other non-financial considerations such as the emotional appeal of owning versus renting. This can at times lead to irrational purchasing decisions. For example, Green observed that while looking at the San Francisco housing market, a market where the cost of renting is far below the cost of buying a home, rational, highly-successful M.B.A. Wharton-West students chose again and again to buy rather than to rent; even after crunching the numbers that proved it was a bad financial decision.

Affordability is another topic that presents itself when looking at rising house prices and rents. Lutz states, “Once one market becomes out of reach,

GWSB OLIVER T. CARR, JR., CHAIR OF REAL ESTATE FINANCE

In 1986, Oliver T. Carr, Jr. established a chair devoted to the study of urban and regional development. In 1962, Mr. Carr founded The Oliver Carr Company, a Washington-area, full-service real estate company with expertise in the development, leasing, and management of office, retail, and mixed-use projects. The company's work now extends beyond the Washington area to include major projects in cities along the eastern seaboard and as far west as Albuquerque, N.M. In 1993, the company went public and is listed on the New York Stock Exchange. Since then, CarrAmerica Realty Corporation, of which Mr. Carr is chairman emeritus of the board, has become one of the major providers of office workplaces in the United States.

Mr. Carr is chairman emeritus of The George Washington University Board of Trustees, and in May 1998, he received an honorary doctorate of public service.

have stayed inline with one another.” But as long as the cost of capital does not dramatically increase, Green predicts, “Nationally we will not see a bubble.”

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such as the growing condo market.” In recent years a growing number of new condo construction and apartment conversions have allowed people to tap into the equity of a home without owning a traditional single family detached home.

The Outlook

Lutz sees a strong outlook for the housing market in the Washington, D.C. metro area. Marquis Custom Homes, part of the Van Metre Companies, offers custom homes from 4,000 to 10,000 square feet. Last year, Marquis Custom Homes constructed sixteen homes. This year, they will build thirty homes, while next year they expect to build fifty to sixty homes. The Van Metre Companies are seeing positive growth across all their companies, which include investment properties, large planned urban developments, condos, and a construction supply house.

The housing market is highly dependent upon many regional factors, and isn't regionally consistent. “I worry about San Francisco, San Diego, and San Jose,” says Green. “Housing prices can not be explained by rents in these locations; however in Los Angeles housing prices and rents

a new
market opens,

MAKING THE COMPARISON— WHICH IS THE BETTER DEAL?

Own, if the after income tax cost of mortgage interest, forgone interest on housing equity, property taxes, maintenance costs and amortized closing costs, all less capital gains, is less than the cost of renting.

i.e., if $V((i+tp)(1-ty)+m+F-PI) < \text{rent}$

- **V** is the purchase price of the house
- **i** is the cost of capital
- **tp** is the property tax rate
- **ty** is the income tax rate
- **m** is the share of house price spent on maintenance each year
- **F** is amortized closing costs
- **PI** is expected capital gains