June 12, 2013

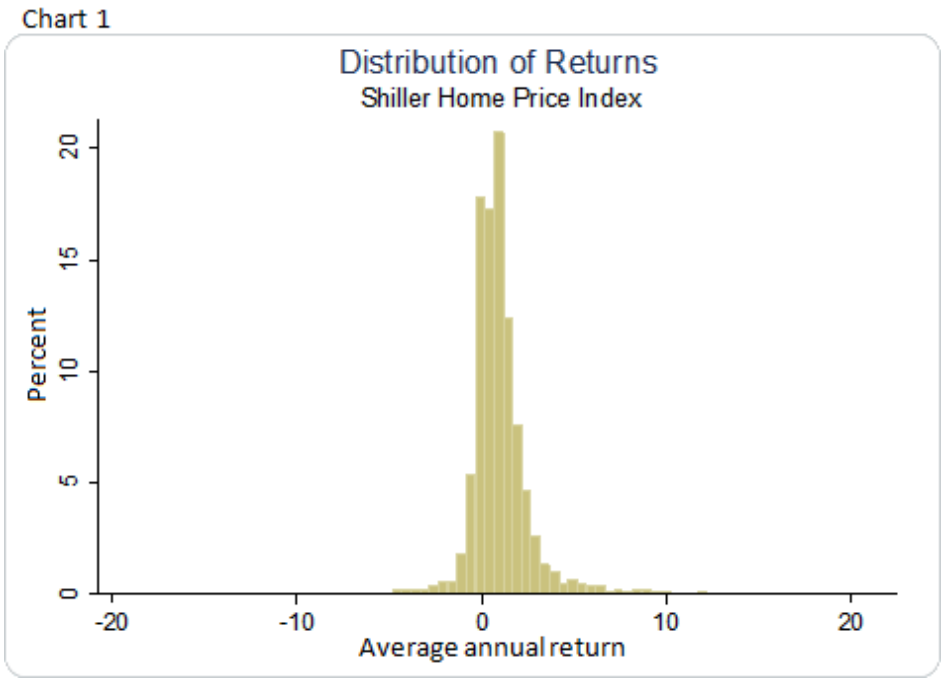
Is Investing in Housing Really a Losing Proposition?

In a recent article in the *New York Times* (here), Robert Shiller notes that a home may not be such a great investment after all. After adjustments are made for inflation, Shiller says that real home prices are more or less flat over the long term and that investors can make better returns by investing elsewhere. Bill McBride and Tom Lawler from Calculated Risk have chimed in on this debate several times over the past few years (here, here and here) by pointing out that there are several methodological issues with the way Shiller calculated home prices before 1986, and that using an alternative series results in a clear upward slope.

While we acknowledge that the gains over time are sensitive to the index you choose to use, we think it's also important to note that returns on investments in housing have not consistently increased regardless of which index you use. Even if you exclude the most recent bubble, there have been notable ups and downs, although none as severe. Shiller and Lawler's work conclude that long-run returns have averaged somewhere between 0.2 percent and 1.2 percent, depending on which series you use, but neither touches on the distribution of returns. This got us wondering—with average returns so close to zero, just how often has the housing market produced losers? And how does investing in housing compare to investing in equities, as Shiller seems to prefer?

As a first step toward answering these questions, we computed the average annual return of home prices across all possible combinations of start and stop points using the Shiller house price series from 1926 to 2012. The distribution depicts returns concentrated around zero with some skewness to the right. Eighty percent of all start-stop point observations experience some degree of positive return (see chart 1).

Chart 1



We acknowledge that this exercise alone is imperfect because it fails to take into account the duration of ownership. Based on analysis published (here) earlier this year by Paul Emrath at the National Association of Home Builders, we assume that the average homeowner lives in his or her home for 13.3 years. We applied this duration to our analysis and found that the volatility in the data series is significant enough to change the distribution of returns. The average annual returns for an asset held for a period of 13 or more years is substantially less volatile than for an asset held for fewer than 13 years, and those investing for the longer term were much more likely to have positive returns. Perhaps more important than the shape of each curve is that both are concentrated at or just above zero. We compute that 40 percent of homes owned for less than 13 years have negative average annual returns, compared to 12 percent of homes owned for 13 years or more (see chart 2). Interestingly, while a much greater portion of those owning for 13 or more years obtain positive returns, the average annual return was actually slightly higher for those owning fewer than 13 years (0.95 percent versus 1.03 percent).

REAL ESTATE RESEARCH SEARCH

Search

RECENT POSTS

Assessing the Size and Spread of Vulnerable Renter Households in the Southeast

What's Being Done to Help Renters during the Pandemic?

An Update on Forbearance Trends

Examining the Effects of COVID-19 on the Southeast Housing Market

Southeast Housing Market and COVID-19

Update on Lot Availability and Construction Lending

Tax Reform's Effect on Low-Income Housing

Housing Headwinds

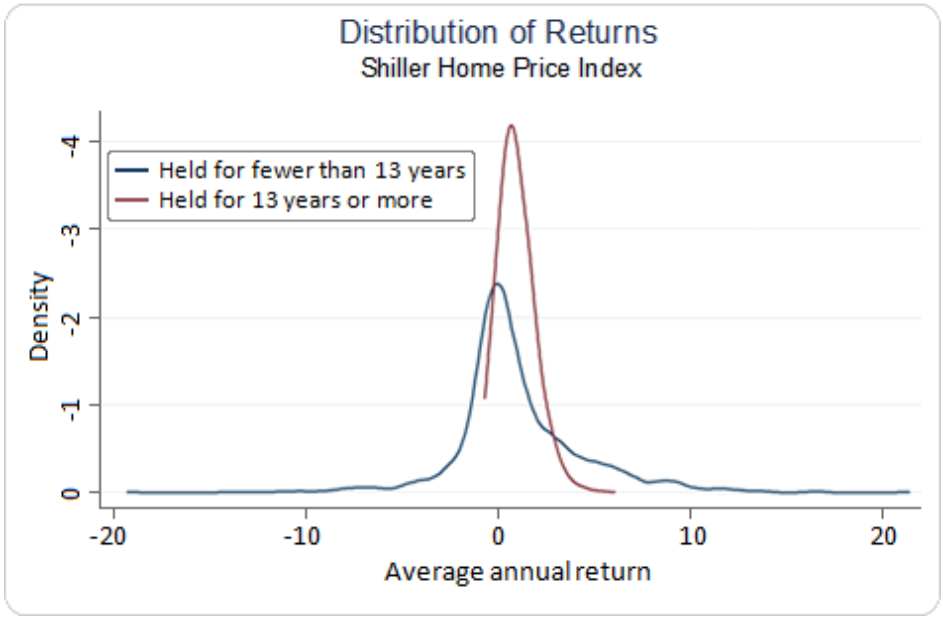
Where Is the Housing Sector Headed?

Did Harvey Influence the Housing Market?

CATEGORIES

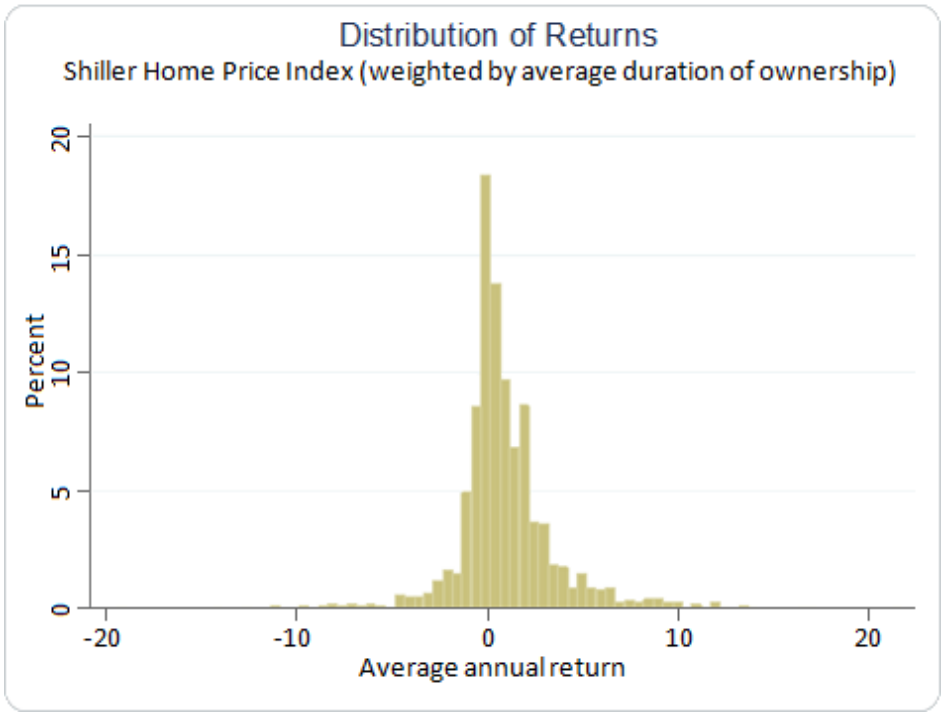
Affordable housing goals
Credit conditions
Expansion of mortgage credit
Federal Housing Authority
Financial crisis
Foreclosure contagion
Foreclosure laws
Governmentsponsored enterprises
GSE
Homebuyer tax credit
Homeownership
House price indexes
Household formations
Housing boom
Housing crisis
Housing demand
Housing prices
Income segregation
Individual Development Account
Loan modifications
Monetary policy
Mortgage crisis
Mortgage default
Mortgage interest tax deduction
Mortgage supply
Multifamily housing
Negative equity
Positive demand shock

Chart 2



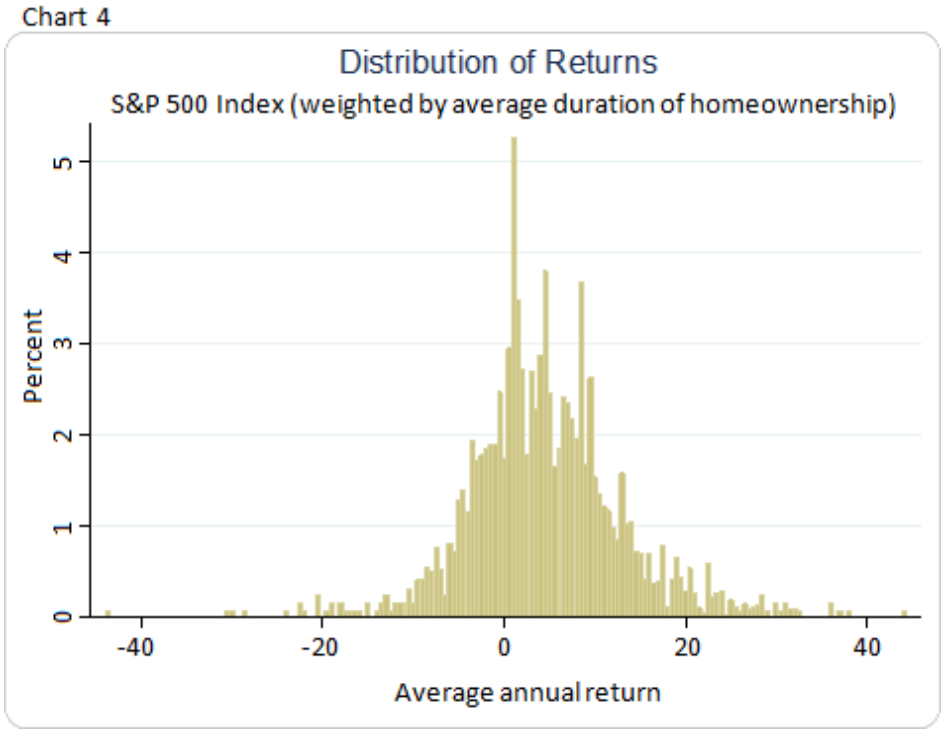
Since it is pretty clear that the volatility in returns varies by length of ownership, we apply weights for average length of ownership using Emrath's Survival Table. Using the weights, we recomputed average annual returns across all possible combinations of start and stop points for average length of ownership. The distribution continues to show that returns are concentrated around zero with skewness to the right; two-thirds of all investors in this distribution experience some degree of positive return (see chart3).

Chart 3



After getting a better feel for average annual returns on homes purchased using Shiller's real home price index, we thought it would be interesting to run through this same exercise with the S&P 500 Index (which we used as a proxy for the stock market) to provide an apples-to-apples comparison of the average annual returns that one could expect from an alternative investment in stocks. The results depict a wider distribution, with longer, fatter tails and some skewness to the right. In other words, there is more volatility in terms of return, but with that volatility comes an opportunity for larger gains over time (see chart 4). In fact, the weighted average annual return of the S&P 500 is 4.55 percent, compared to 0.97 percent for the Shiller real home price index.

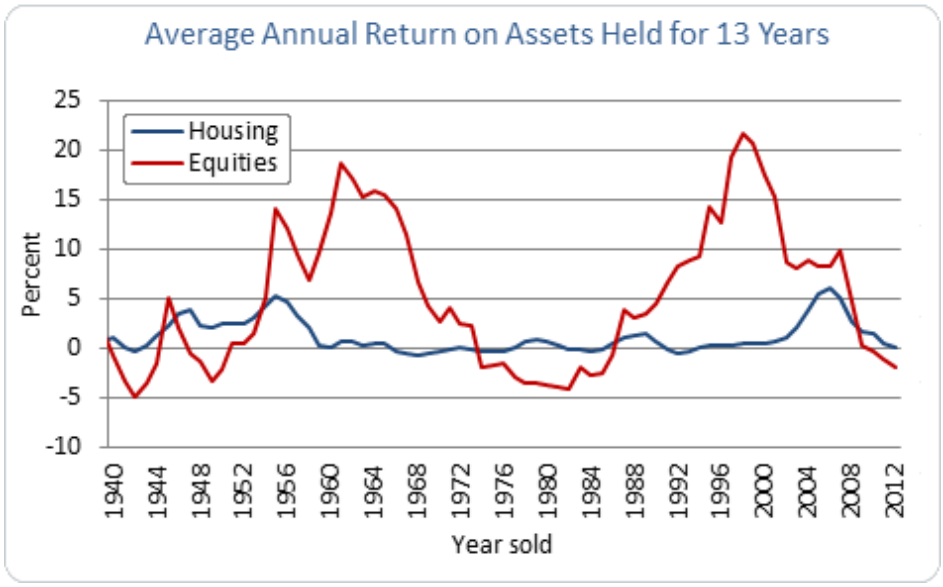
Chart 4



Positive externalities
Rental homes
Securitization
Subprime MBS
Subprime mortgages
Supply elasticity
Uncategorized
Upward mobility
Urban growth

As a final exercise, we added a time dimension and charted the average annual return on assets for housing and the S&P 500 Index assuming that each asset is held for 13 years from its purchase (see chart 5).

Chart 5



It's important to note that the distributions of returns for housing in all these computations are not the distribution of returns for every possible house purchase. Likewise, the returns shown for the S&P 500 are not the entire universe of returns from buying and selling individual stocks. Instead, these returns are based on a pool of housing and a pool of stocks. Therefore, the chart speaks not to the distributions of returns to individual assets, but the group as a whole. Further, the returns to housing in the chart ignore the fact that homeowners might have additional gains from owning if their mortgage replaces rent. Indeed, according to some calculations, homeowners who buy a home today and hold it for seven years can expect to pay 44 percent less than people who choose to rent.

Depicting average annual returns in this format helps to demonstrate two points. First, Shiller's point that "real home prices rose only 0.2 percent a year, on average" was not far off the mark, as returns on investments in housing using our approach do appear to hover around zero for most of the time series. Second, Shiller's comment that "it's hard for homes to compete with the stock market in real appreciation" seems to be fair. If a home is purchased only as an investment and not as a place to live, this comparison of average annual returns clearly shows that investing in equities offers favorable returns more often than investing in housing.

By Ellyn Terry, an economic policy specialist, and

Jessica Dill, senior economic research analyst, both in the Atlanta Fed's research department

June 12, 2013 in Homeownership, Housing boom, Housing prices | Permalink