

National Housing Market Trends: Reality Distortion When Not Looking at the Local Level

Everyone wants to know what their home is worth. In some cases, the estimate of value influences the decision of whether or not to walk away, a practice known as strategic default.

For research on home price trends, the typical household has primarily the media reports from three widely publicized indices:

- The S&P/Case-Shiller Home Price Index
- The FHFA House Price Index
- Reports from NAR, the National Association of REALTORS

In this month's HomeValueForecast.com Lessons from the Data, we explore the 3 indices and why we believe homeowners should rely on micro level market data as well.

The widely followed S&P/Case-Shiller (C-S) Repeat Sales Index makes headlines on a consistent basis. In order to control for changes in quality or quantity of a changing basket of home sale transactions, C-S relies on repeat sales of the same property and tracks changes in the index from a composite of all repeat sales. A possible weakness in this method is that the index could exaggerate price declines for the non-distressed home seller because it includes both the normal non-distressed sales and bank REO foreclosure sales, which often represent huge discounts to actual market prices.

The REO sales skew the results downward when prices are falling and then when prices increase, will skew the results upward as the index will be starting from a lower than otherwise starting point. The C-S weighting system attempts to hold year-2000 initial sale weights constant so more expensive homes have more weight. Several filters attempt to screen out non-arm's-length transactions and foreclosures, but foreclosures that are later sold as REO by banks are included as repeat sales. Other considerations include:

- In markets with many foreclosures that become REO sales, there is an unusual and negatively biased impact on the price index if looking to estimate the impact on a typical owner versus a portfolio holder of the entire market
- In markets with a number of new homes, the index will be biased toward older homes that have sold twice, and so the index is less representative of the typical home in that market

Another popular Index is the quality-adjusted FHFA (Federal Housing Finance Administration) House Price Index, formerly known as the Office of Federal Housing Enterprise Oversight (OFHEO) House Price Index. This Index is built using repeat mortgage transactions on single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac since January 1975. Limitations in the Index include it not covering the upper-priced markets, especially in California where many mortgages are above conforming loan limits and a significant time lag, making it less applicable for understanding current market trends.

With the FHFA Index, only conforming loans from the two GSEs are included, limiting the sample to those with mortgages of less than \$417,000 as of 2012, (although we did see a temporary set of higher

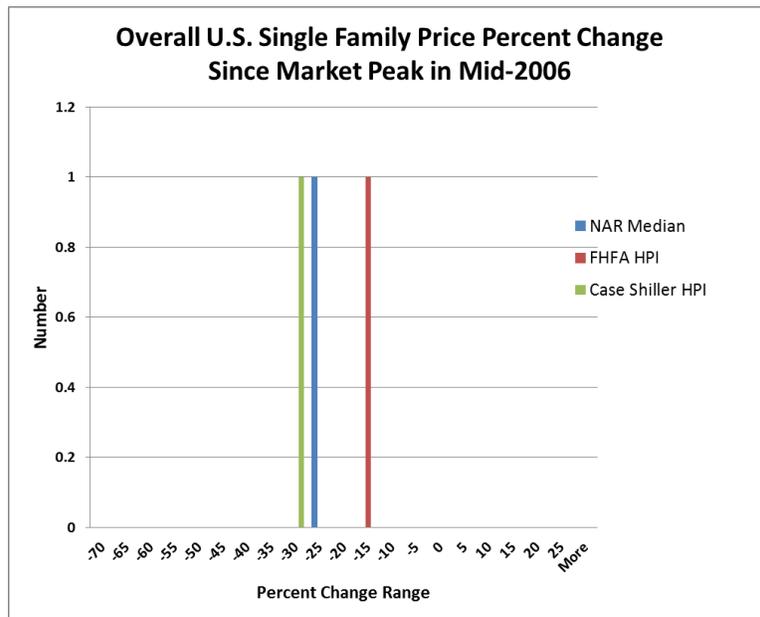
conforming loan limits in 2009 through part of 2010). This price limit makes the sample sufficient in areas with low density, inexpensive land and more affordable housing; but severely limits the applicability to higher-priced markets including most of California, metro markets such as Boston and New York, and coastal markets.

A third popular index is the median home prices as published by the National Association of REALTORS (NAR). This Index covers all markets and is not quality or size adjusted, so the mix in size and quality may affect the median price result.

Index Comparisons

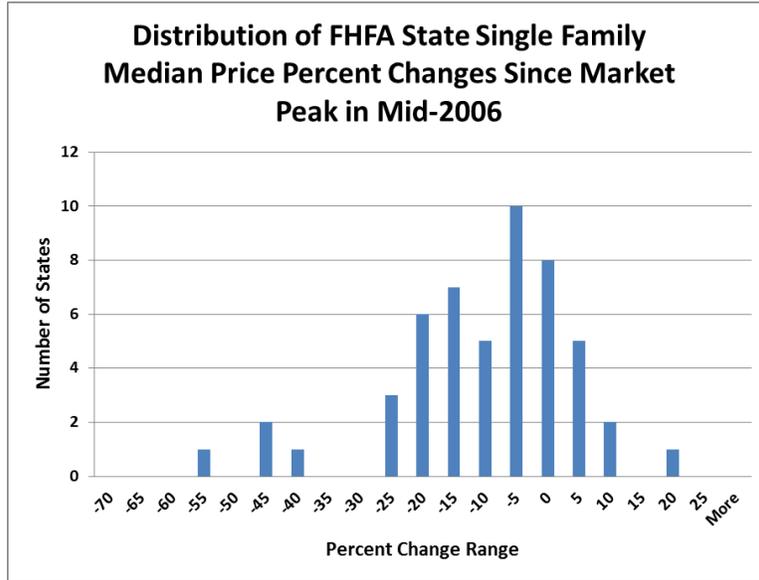
Below in Figure 1 we compare these three popular indices from mid-2006 to the first quarter of 2012 for the entire US. The Case-Shiller index suggests the greatest loss in value, with the NAR median next worst in value loss and the FHFA quality adjusted index as having the least amount of loss at around half the net loss suggested by C-S.

Figure 1



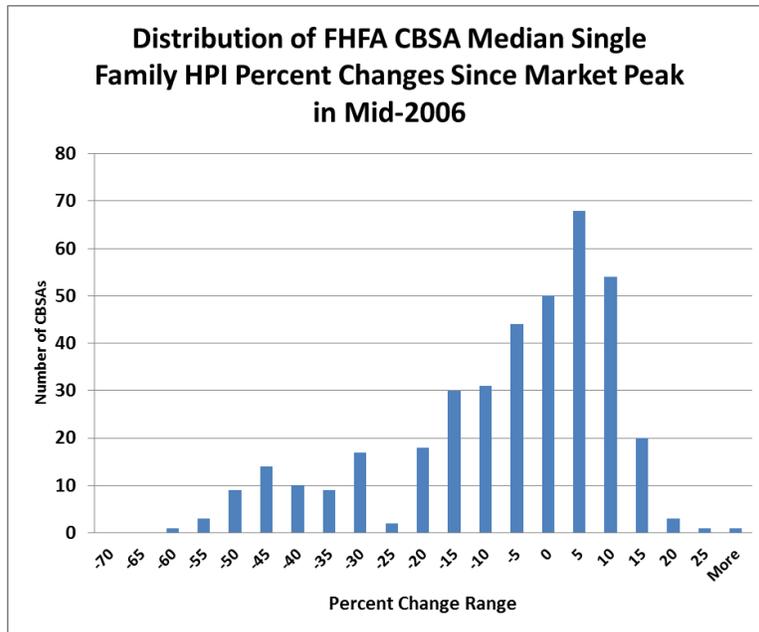
As we drill down from a distorted national picture to the state level, we start to see a great deal of dispersion in terms of the average price change. For example, in Figure 2 we use the changes in the FHFA House Price Index at the state level. What is remarkable is that several states have seen positive price movements since mid-2006 while others, like Nevada, are pulling the national index downward, like the tail wagging the dog.

Figure 2



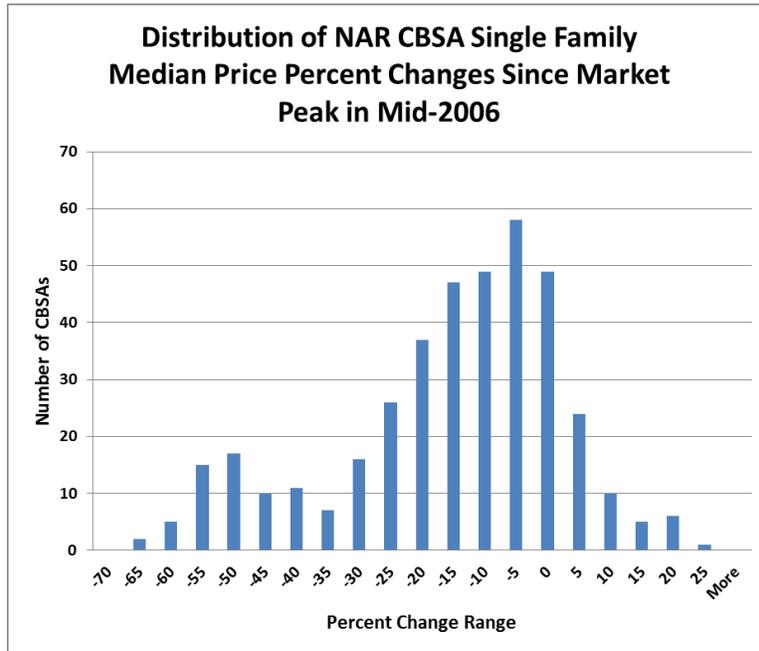
We get a similar picture as we drill down even further using the same FHFA index data, now at the CBSA level, shown in Figure 3.

Figure 3



The NAR results at the CBSA level look similar to that of the FHFA but shifted slightly to the left, as seen in Figure 4.

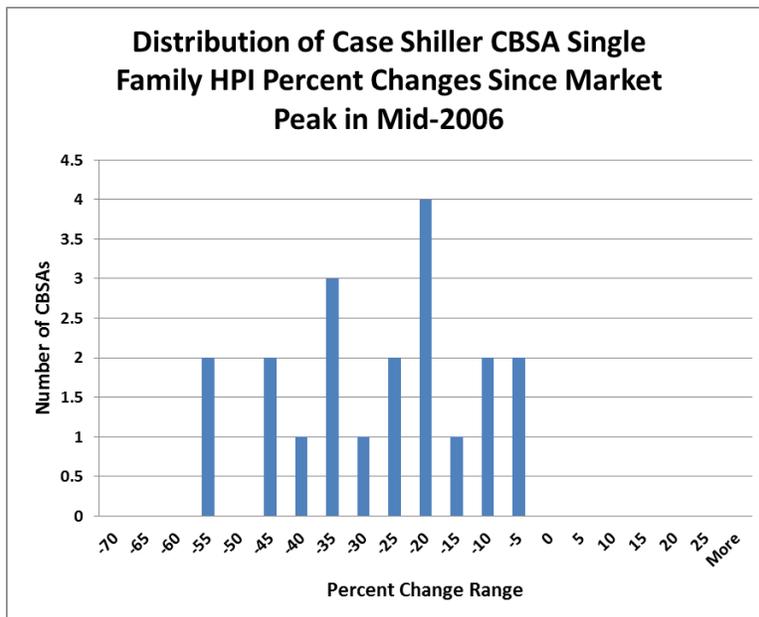
Figure 4



The NAR results include a wider range of price levels and also reflect the change in the mix of sales that has seen the upper priced markets as less active (with less subprime and lower loan to value mortgages on average) than the lower priced markets over the last 5 years.

Figure 5 below shows the same CBSA results for C-S. Note how there are no positive changes in prices.

Figure 5



The bottom tail of the distribution is similar to the FHFA but the upper end of the distribution is nowhere as positive. The overall picture is much more negative, making one wonder about how much the distressed REO sales are affecting the index?

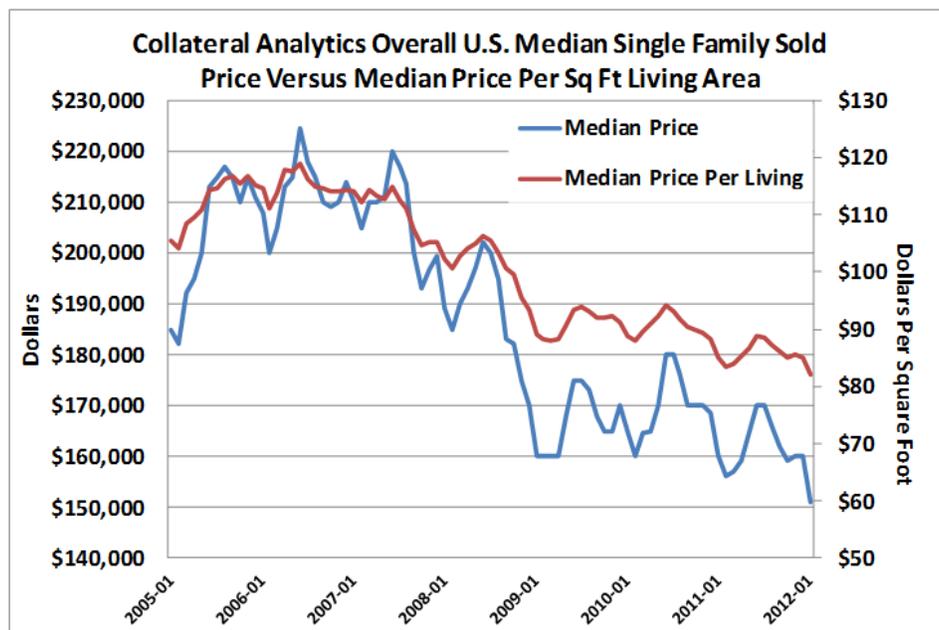
This is not to say that REO sales do not represent value. They do in many markets where distress is dominant and regular sales are affected by the well documented contagion effect. But in many localized markets the distress sales do not dominate the market.

Micro Market Trends

One reason why we see variations in the NAR indices is because of the lack of control for size. When you control for size by simply reporting the price per square foot instead of the total price, the result is less volatility.

Prices have moved less than reported for the typical home. It is just that the typical homes that were selling, or being forced to sell were slightly smaller in 2009 to present compared to the previous 5 years. This is shown in Figure 6 where we see that prices per square foot move much less than medians, where no controls for size are imposed.

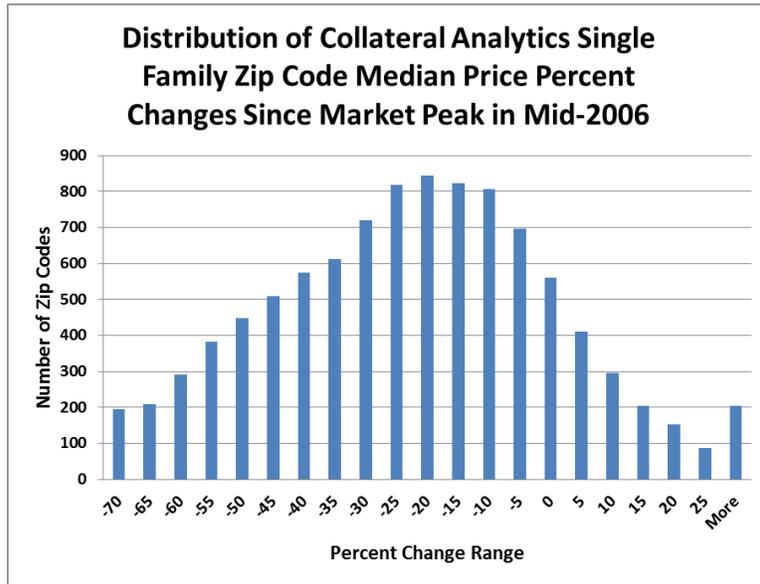
Figure 6



As we move towards more granularity, the ZIP code level impact of distress will be felt in those markets with a significant proportion of distressed sales. In healthier markets where such sales are less common we will get entirely different results.

The analysis from Collateral Analytics highlighted in Figure 7 shows that since mid-2006, looking at ZIP code/local level trends we have seen a distribution in median home price change from -70% and below to +25% and above, emphatically supporting our contention that all real estate is local and to understand trends you have to look at micro markets, not national averages.

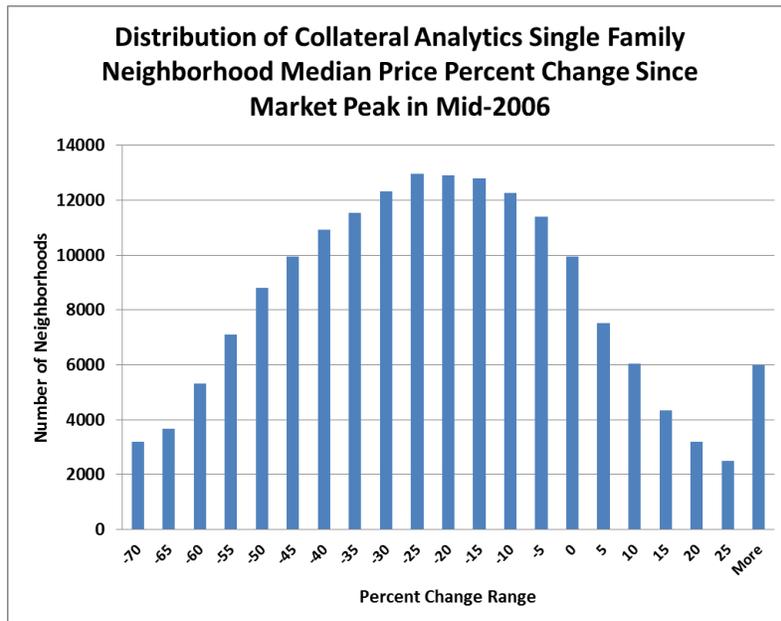
Figure 7: Zip Code Level Aggregation



We dive even into more granularity below where we use neighborhood home price indexes tracked by Collateral Analytics.

There are about 10 to 20 neighborhoods in the typical ZIP code, and each one is defined by a commonality of typical features. We see this is Figure 8 below.

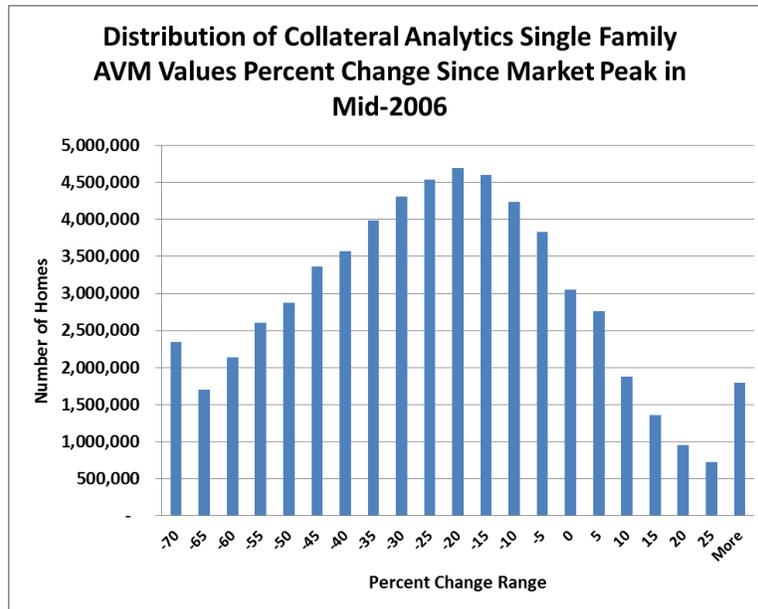
Figure 8: Diving into Smaller Geographies



The distribution of price changes is similar, but we do see a fatter tail of markets with significantly increased prices since the trough and a somewhat thicker distribution showing more variation in price trends.

In Figure 9 we drill down all the way to the individual home level by using the Collateral Analytics CA Value AVM. In particular, we ran an AVM for every single family home in the U.S. as of mid-2006 and calculated the percentage change to the current AVM value.

Figure 9: Drilling down to the Individual Home



Here again we see more variation in price movements, with even fatter tails or extremes in terms of homes that have moved up or down in price since 2006. What we see is that many home owners have done very well and many have been wiped out. This is the true reality behind the price trends. Anything above this level that averages individual homes together will miss the mark.

Conclusion

All real estate trends are local, and what's happening on a national average is of little consequence when trying to sell your \$200,000 home in Phoenix or your \$2,000,000 condo in New York City.

While interesting to look at, HomeValueForecast.com views the major indices as imperfect when used for comparison. Specific limitations include:

- The Case-Shiller indices tend to overstate the price trends in both directions for the typical non-distressed homeowner, and may understate the decline for the distressed homeowner
- The FHFA indices miss the upper end of the market
- The NAR indices are very much influenced by a mix of size and quality that is not constant over time

Housing prices within ZIP codes don't move in perfect correlation with the metro market; neither do housing prices in different neighborhoods within a single ZIP code necessarily move in lockstep. Local Realtors know this and divide MLS markets into neighborhoods that are subsets of ZIP codes or crossover ZIP codes.

As we drill down to more localized markets at the neighborhood level and individual home level we start to see reality for homeowners. If your market is still dominated by distressed sales you are negatively affected, but for many homeowners prices have started to move up. In fact, at the ZIP code level, about a quarter of all home price indices are positive since mid-2006. Maybe the glass is a quarter full for them, but you would never know that relying on national, state or even CBSA level price indices.

Today, with the benefits of technology and better geographic based analysis we can drill down to the homeowner's micro market and need not rely on aggregation.

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